EXPERIMENTER BEHAVIOR AND GROUP SIZE AS VARIABLES INFLUENCING SELF-DISCLOSURE

By

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TO

MY WIFE

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iii

LIST OF TABLES v

LIST OF FIGURES vii

Chapter

I. INTRODUCTION 1

II. METHOD 31

III. RESULTS 48

IV. DISCUSSION 67

V. SUMMARY 96

APPENDICES 100

REFERENCES 122

BIOGRAPHICAL SKETCH 126

LIST OF TABLES

Table Page

1. Analysis of Variance of Subjects' Selection Questionnaire Scores By Group.......... 32

2. Cell Means and Variances for Groups Matched on Basis of Selection Questionnaire Claims.......... 33

3. Summary of the Analysis of Variance for the Effects of Group Size and Experimenter Behavior on Self-Disclosure.......... 50

4. Means of Self-Disclosure Scores By Experimental Conditions.......... 51

5. Duncan Multiple Range Test for Comparisons Amongst Cell Means.......... 55

6. Summary of the Analysis of Variance for the Effect of Replications in The 8-Person, E-Disclose Treatment Combinations.......... 57

7. Summary of the Analysis of Variance For the Effect of Replications in The 8-Person, E-No-Disclose Treatment Combination.......... 58

8. Summary of the Analysis of Variance For the Effect of Replications in The 4-Person, E-Disclose Treatment Combination.......... 58

9. Summary of the Analysis of Variance For the Effect of Replications in The 4-Person, E-No-Disclose Treatment Combinations.......... 59

Table Page

10. Summary of the Analysis of Variance for the Effect of Replications in the 2-Person, E-Disclose Treatment Combination 59

11. Summary of the Analysis of Variance for the Effect of Replications in the 2-Person, E-No-Disclose Treatment Combination 60

12. Pearson Product-Moment Correlation Coefficients Between External Control of Reinforcement and Individual Self-Disclosure Scores For Subjects in the Six Treatment Combinations 62

13. Pearson Product-Moment Correlation Coefficients Between Self-Other Ratings of Self-Disclosure and Individual Self-Disclosure Scores For Subjects in the Six Treatment Combinations 64

14. Pearson Product-Moment Correlation Coefficients Between Selection Scores and Total Individual Self-Disclosure Scores for Ss in the Six Treatment Combinations 65

15. Pearson Product-Moment Correlation Coefficients Between Selection Total Scores and Experimental Total Scores For Ss in the Six Different Treatment Groups 90

16. Pearson Product-Moment Correlation Coefficients Between Highest Scale Value (Median Value) Selection Scores and Highest Scale Value (Median Value) Experimental Scores 90

List of Figures

Figure | Page

1. [illegible] Experimenter [illegible] Groups 53

2 [illegible] for [illegible] tion 54

3 Percentage of Ss in the 8-Person, 4-Person and 2-Person-E-Disclose Treatment Combinations Answering Each of the Items in the Self-Disclosure Schedule 70

4 Percentage of Ss in the 8-, 4-, And 2-Person, E-No-Disclose Treatment Combinations Answering Each of the Items in the Self-Disclosure Schedule 71

CHAPTER I

INTRODUCTION

✓ Self-disclosure as a variable in interpersonal communication has become the focus of considerable interest in the field of psychology over the past several years. It was perhaps Lewin (1953) who began a form of systematic theorizing about self-disclosure when he considered differences between American and German personality types, and the areas of the self which these types made accessible to others. According to Lewin, the German typically possessed a large core of self-information which was seldom made accessible to others, and then only to intimate associates. The American, on the other hand, typically revealed large amounts of information about himself, often to casual acquaintances.

✓ Research in self-disclosure as a process of interpersonal exchange of self-information has been conducted extensively through the use of questionnaires. Jourard and Lasakow (1958) developed a sixty-item questionnaire with items which fall into six general categories of information about the self. Experimental subjects are instructed to indicate the extent to which they have "talked about" or revealed the information included in each of the items in these categories to specified [illegible]."

To date, this approach to research in self-disclosure has shown that differences in the [illegible] of self-information are related to a number of variables. ✓Among these are, subject-matter differences, i.e., whether one talks about his financial status, his personality, attitudes toward morality, religion, etc. (Jourard and Lasakow, 1958), differences in target-person as defined by that person's social role or by the subject's expressed liking for the target (Jourard, 1959 b, Jourard and Landsman, 1960, Jourard and Lasakow, 1958), group differences with regard to sex, i.e., women disclose more than men (Jourard and Landsman, 1960, Jourard and Lasakow, 1958), nationality (Jourard, 1961 d; Plog, 1963), race (Jourard and Lasakow, 1958), and religion, with Catholic, Methodist, and Baptist college males disclosing less than Jewish male college students (Jourard, 1961 b).

* ✓ Jourard (1961 a) found that with increasing age, individuals disclose less to parents and same-sex friends, while disclosure to opposite-sex friend, or to one's spouse, increases from age 17 to approximately age 50 and then drops off. Rorschach responsiveness and self-disclosure have been found to be positively related (Jourard, 1961 c), as have nursing competence ratings of interpersonal relationships with patients and self-disclosure (Jourard, 1962). The need for security and

[illegible] for certain kinds of academic work (Powell and Jourard, 1963) have also been shown to be related to self-disclosure. Jourard and Rubin (1968) report that physical contact (body-touching) and disclosure scores are significantly related for men when the target is a same-sex friend, but unrelated when the target-person is a female friend. For women, self-disclosure and touching were significantly related only when the target was a male friend. Altman and Haythorne (1965) demonstrated that socially isolated subject dyads exhibited more interpersonal exploration (as measured by questionnaire reports) than did non-isolated controls. Finally, self-disclosure output to a given target-person has been found to be highly correlated with the amount of input from that person. This input-output correlation has been termed the "dyadic effect" (Jourard, 1959, b; Jourard and Landsman, 1960).

Self-disclosure, as a patient variable related to prognosis, has become the subject of study in psychotherapy research. Probably the earliest empirical work of this nature is that of Peres (1947). Studying patients in group psychotherapy, Peres found that successful patients made twice as many personal references during the course of psychotherapy as compared to unsuccessful patients. Seeman (1949), Sechrest and Berger (1961), Truax (1961), and Truax and Carkhuff (1965) have added [illegible] in the [illegible] patient [illegible] or self-disclosure [illegible] to positive [illegible] outcome. [illegible] authors, however, also [illegible] which [illegible] to question the generalizability of their own and other findings. Truax and Carkhuff report three studies of client transparency in both individual and group psychotherapy. In two of these, involving hospitalized mental patients engaged in group psychotherapy, the findings confirmed previous results: the greater the patients' engagement in the process of self-exploration and self-disclosure, the greater was the degree of constructive personality change. For the third group, however, comprised of institutionalized juvenile delinquents participating in group psychotherapy, results opposite those previously found were reported: the less the amount of self-exploration or self-disclosure in psychotherapy, the greater the degree of positive personality change. Truax and Carkhuff conclude:

> If this finding holds up in other analyses, it suggests that while self-exploration, self-disclosure, or transparency is helpful in producing positive changes in the mentally ill person whose disturbance is internal, the same transparency or self-exploration might be of no value, or even harmful to the socially ill person whose disturbance is primarily external. In the one case, the patient perhaps lacks a knowledge of self, whereas in the second case the delinquent perhaps lacks a knowledge and understanding of his social world (1965, p.7).

In a somewhat similar vein, Jourard (1964) suggests [illegible] self-disclosure and mental health. Accordingly, too much or too little self-disclosure indicates disturbance in mental well-being, while some as yet *undetermined amount, under specified conditions*, is synonymous with mental health"(p.15) *

Research and theoretic interest have also been directed toward the contribution of psychotherapist behavior in the therapeutic encounter. Specifically, therapist transparency, or self-disclosure, has become a topic of interest (Rogers, 1957, Jourard, 1959 a, 1961 a, f, 1964, Truax, 1961; Truax and Carkhuff, 1965; Carkhuff and Berenson, 1967). Current opinion is weighted toward the notion that the therapist, through his own genuineness or "transparency" in the psychotherapeutic encounter, provides a model for the patient to imitate. Jourard (1964) has suggested that self-disclosure, within, or outside of, the therapeutic encounter, is akin to a "trading" relationship and may be governed by the laws of operant learning. That is, self-disclosure "begets" self-disclosure, and this "begetting" possesses reward properties which serve to elicit further self-disclosure (the dyadic effect). Powell (1964) has provided direct experimental support for this idea. He demonstrated that self-disclosure statements on the part of an *E* were more effective reinforcers of [illegible] positive and negative self-statements than were either [illegible] supportive or reflective-restatement utterances in an experimental interview."

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*Italics added

Jourard (1967), turning his attention to the E-S relationship in the psychological experiment, reiterates his earlier position concerning the "dyadic effect" in self-disclosure:

> The most powerful "determiner" of self-disclosure appears to be the willingness of the audience person to disclose himself to the subject to the same extent that he expects the subject to confide his own experiences . It is necessary to ask whether the relationship between the experimenter and his subject is such that a dyadic effect can occur. Is it anything like dialogue? Do the laboratory setting and the typical relationship between the investigator and his human subject provide the conditions for the fullest, most authentic disclosure of self by the latter, whether in words, in writing, or by means of action, of unequivocal, revealed meaning?(p.112)

In his latest writing, Jourard (1968) argues that "psychological research with human subjects can be looked at as a special case of research in self-disclosure," and that the subjects' experience of the experimenter-subject relationship does have an effect upon the subject's behavior, "that is, his disclosure, both verbal and nonverbal. . .in the research situation"(p.3).

Jourard (1968) reports results of research which indicates that subjects' performance in a variety

[illegible]

Two of [illegible] 1967) demonstrated [illegible] experimental $\underline{S}$s produced significantly different change scores on standardized psychological tests when the experimenter engaged in a period of mutual self-disclosure with his subjects, between the first and second administration of the instrument This was in contradistinction to significantly less positive (and, presumably, less "open") response changes by subjects in control groups with whom the $\underline{E}$ had no intervening period of mutual self-disclosure. Similarly, Frey (1967) demonstrated that experimental subjects who take part in a mutually-open pre-experimental interview with the experimenter perform significantly better on a paired associates learning task than do subjects who have no prior acquaintance with the $\underline{E}$.

Friedman (1968) demonstrated that the degree of experimenter "presence" or "closeness" (ranging from $\underline{E}$-absent to direct eye contact between $\underline{E}$ and $\underline{S}$) to experimental subjects had differential effects upon men and women subjects For a male $\underline{E}$, and female subjects, it was found that increasing the amount of physical presence or closeness resulted in decreased verbal disclosure to the $\underline{E}$ on a list of personal topics For male subjects paired with a male $\underline{E}$, on the other hand, increased [illegible] disclosure to the E [illegible] jects.

These resear[illegible] similar to those reviewed by Rosenthal ([illegible]), in his discussion of the nature and effect of 'situatio[illegible] psychological research. Thus, Sacks (1952) [illegible] experimenter contact with nursery school [illegible] differentially affected intelligence test [illegible] -- depending upon the nature of the E S [illegible] between the pre- and post-contact measures. Interaction with one group of children in a manner characteristic of a "good, interested, and warm teacher" resulted in an average I.Q. increase of 14.5 points. Children interacting with a teacher who assumed the role of a "dull-appearing, uninterested teacher" showed an average I.Q. gain of 5.0 points on the post-contact examination. On the other hand, children in a no-contact control group obtained an average I.Q. increase of only 1.6 points.

Using college students as subjects, Kanfer and Karas (1959) demonstrated the effects of prior experimenter contact in a study involving the conditioning of first person pronouns. Of four groups of subjects, three experienced prior contact with the E. During the period of prior contact, one group of Ss was given positive feedback about their performance on a brief intelligence

[illegible]

that [illegible] E in [illegible] contact with the E [illegible] Ss in the no-contact [illegible]

Solley and [illegible] similar to those of Kahn and [illegible], report that verbal [illegible] fully obtained only [illegible] informal conversation [illegible] sessions.

From the [illegible] there exists a conclu[illegible] disclosure which has been accumulated through the questionnaire study, by investigation of the psychotherapeutic encounter, and through experimenter-subject prior-contact research. Several additional questions, however, arise from this research concerning the parameters of self-disclosure.

The first of these concerns the use of questionnaires in self disclosure research, and the nature of what is actually being studied, measured, and, in some instances, affected by this form of research. This issue was raised and investigated by Drag (1968). She noted that the measurement of past disclosure may be subject to discrepancies between Ss self-reports and

[illegible]

these [illegible]. Drag [illegible] the questionnaire research in se[illegible], with few exceptions (see Taylor, [illegible]; [illegible]; [illegible] and Haythorne, 1965), has provided [illegible] self-revelation in relation to persons [illegible] whom the discloser has had fairly intimate [illegible]ips over some past time period, but tells us little [illegible] the process of self-disclosure as a developing, on-going process.

She states:

> the meaning of self-disclosure as behavior is still an unsolved question. . . . The questionnaires do not measure this, nor do they explore how people go about disclosing themselves. Further, questionnaires do not take into account the reality of a given individual's social settings or the contexts in which disclosure occurs (p. 9).

[illegible] utilized a self-disclosure questionnaire as an instrument for the selection and matching of her experimental subjects into groups. When she conducted a validity check upon her Ss' indicated willingness to disclose personal information to a target person specified as a "stranger" and what these Ss actually disclosed in an ongoing dyadic situation, Drag found that her results differed as a function of the experimenter-subject interaction in the experimental setting. Subjects' previously-administered questionnaire claims were good predictors of actual self-disclosing behavior to a [illegible] [illegible] as "stranger" when the E presented herself as an "impersonal, non-disclosing interviewer," and when she remained an anonymous other, i.e., when she had no prior-contact with experimental Ss. However, the questionnaires were not good predictors when Ss were placed in an experimental situation in which the E shared personal information with her Ss. Drag explains her results as follows:

> (When utilizing...) questionnaire responses of willingness to disclose to a stranger . . . Ss are asked to project themselves into a situation and tell an unknown E what they would be willing to do with a hypothetical person. This type of response has an 'as if" quality. Ss are asked to imagine what it would be like to disclose on "such and such" a question. In this study, these "as if" questionnaire responses were then compared with corresponding behavior when potentially different reactive conditions were introduced. . . .Basically, the reactive condition revolved around whether or not Ss had the opportunity to question the stranger in return and how much information they could gain about the stranger It was found that if the situation and relationship did not involve a two-way communication or "opportunities for trading" information, then yes, Ss were correct in their projections. Their questionnaires were valid in predicting their performance. Ss simply maintained their prior commitment not to disclose information about themselves. The reactive factor affecting the validity of the questionnaires resulted from the fact that E had different social stimulus value for Ss in groups where she was an anonymous person, or a non-committal interviewer (as opposed to the others in which) she was an open, self-disclosing person (pp 107-108)

Drag's finding concerning the predictive validity of the questionnaires is similar to that of [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible], Worman, [illegible] [illegible] to [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] experimenter [illegible] [illegible] How- ever, provides [illegible] [illegible] [illegible] [illegible] support for Jourard's argument. [illegible] the exception of a few studies (Drag, 1968, Resnick, 1968, Powell, 1964), no research has been done which examines self-disclosure in an ongoing controlled research situation as both the independent variable and as the dependent variable.

Drag's (1968) study is similar to other E prior-contact research in that she, too, utilized prior experimenter acquaintance as an independent variable affecting an experimental task. She, in contradistinction to the other researchers cited above, made self-disclosure the dependent variable of her study and provided a direct test of, and validation for the existence of a dyadic or modeling effect in an ongoing well-controlled experimental situation. Drag found that when Ss were involved in a 20-minute session of open dialogue with the E, subsequent to which S and E played a game called "Invitations" that is actively selected and disclosed on more [illegible] *E* who had been "interviewed" [illegible] A third group [illegible] the *E*, but w[illegible] obtained self-disclosure [illegible] mid-way between [illegible] "interview" group.

[illegible] effect" carr[illegible] *E* were rai[illegible]d in the [illegible] segment [illegible] those *Ss* who were [illegible] with the *E* [illegible] *Dialogue-Inv[illegible]* treatment [illegible] pairings maintained the sam[illegible] level of [illegible] as they had attained in the [illegible] pairings in the *No-prior I[illegible]* [illegible]tion in the [illegible] of a 20-[illegible] dialogue [illegible] who played the game of In[illegible] the *E* there occurred a general increase of s[illegible] *E-S* to *S-S* pairings) which was eq[illegible] obtained by the *Dialogue-Invitations* gro[illegible] *Interview-Invitations* group, however, remained at the same low level of disclosure from the *E-S* [illegible] *S-S* pairings. Their scores were equivalent to those attained by a *No-Prior Interaction, No-Invitations* group of controls, who merely played the game of Invitations in *S-S* dyads.

Resnick (1968) conducted an "ongoing" study [illegible] by means of [illegible] S-pai[illegible] basis of their "[illegible] to disclose to a same-sex stranger." [illegible] closers with other high-disclosers, [illegible] basis of these questionnaire [illegible] depth or intimacy of disclosure [illegible] was significantly greater than that of [illegible] dyads. In a second part of her study, [illegible] paired high and low Ss at random, and followed the same procedure as in her original pairings. She found that high-disclosers attained the same depth of intimacy as when they had previously been paired with high-disclosing partners. Perhaps more interesting is the finding that the original low-disclosers revealed personal information at the level set by their high partners. The average disclosure scores of the low-disclosers were significantly higher in the second segment of the experiment from the scores which they attained in the original low-low pairings, although not different from the scores obtained by their high partners.

Research in the psychotherapeutic encounter has also contributed much evidence for the existence of a dyadic effect or, as Jourard (1965) has stated, an "invitational pull" in self-disclosure. "The therapist's behavior has been shown to be a powerful determiner of client transparency. There is no research evidence to [illegible] argued, for example, that [illegible] research on psychotherapy has also shown that [illegible] to the relationship (the [illegible] correlated with, and therefore can [illegible] in the other party (the client) [illegible] in which the [illegible] of disclosure [illegible] rewards due to the intimate [illegible]. One may ask to what extent [illegible] or self-disclosure would [illegible] a situation in which the "risk" or "cost" of disclosing and/or the rewards made possible by disclosing self-information is varied along a dimension [illegible] low in an empirically-defined and measurable manner. One might draw here from the analogue of group psychotherapy, in which at least the "cost" or "risk" of self-disclosure would seem to be greatly enhanced. [illegible] (1964) has gone so far as to suggest, for example, that group psychotherapy is the treatment of choice [illegible] a group of other individuals the client is offered the opportunity to "get it all in the open" once and for all information which would continue to exist as a protected, even though talked about, set of "secrets" in a dyadic encounter.

[illegible] Almost [illegible] research [illegible] which has focused upon self-[illegible] process has been conducted [illegible] as the focus of interest. [illegible] literature have been co[illegible] disclosure in groups larger [illegible] have were conducted [illegible] (see Pores, 1[illegible], Seor[illegible] and Carthaft, 1965), self-[illegible] or T-group (Culbert, 1966) or [illegible] room [illegible] (Himelstein and Kimbro[illegible] rather than in a controlled experimental [illegible] one in which this parameter could be varied [illegible]cally. One exception to this, although not con[illegible] with group size, is a study conducted [illegible] and Himelstein (1967) in which the authors [illegible] naive Ss in an experimental situation with [illegible] of the E's Chittick and Himelstein found [illegible] each of their Ss was paired with the two confede[illegible] the Ss tended to conform to the pattern of self-disclosure established by them. When the confederates revealed more self-[illegible]formation, Ss tended to reveal more. Conversely, when the confederates were less open about themselves, the experimental Ss were also less open on disclosing. A second result of interest in Chittick and Himelstein's study is that they found no relationship between the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]iveness [illegible] [illegible] [illegible] [illegible]al variables rather than [illegible] [illegible] [illegible] of information which [illegible] [illegible] [illegible].

Objectives of Present [illegible]

The purpose [illegible] [illegible] [illegible] [illegible] extend the investiga[illegible] [illegible] [illegible] [illegible] variables as possible [illegible] [illegible] [illegible] [illegible] disclos[illegible] than the [illegible] [illegible] [illegible] [illegible] [illegible] The primary objective [illegible]

(1) To [illegible] [illegible] [illegible] [illegible] [illegible] varia[illegible] [illegible] [illegible] behavior [illegible] [illegible] [illegible] [illegible] [illegible]closing [illegible] [illegible] [illegible] [illegible]

(2) To [illegible] [illegible] [illegible] [illegible] expectancy [illegible] [illegible] reinforcement in relation [illegible] [illegible]

(3) To [illegible] [illegible] [illegible] [illegible] view[illegible] [illegible] [illegible] [illegible] [illegible] others' [illegible] [illegible] [illegible] range of [illegible] [illegible] [illegible]

( ) To [illegible] [illegible] [illegible] [illegible] between [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

[illegible] (Altman, [illegible]) [illegible] present study.

Summary of [illegible]

The [illegible] postulates [illegible] in social rel[illegible], and a varying [illegible] cial ones to more [illegible] en- selves to each [illegible] about the other. Di[illegible] according to this theory [illegible] interactions which occur [illegible] for, and [illegible] the nature of inter- actions at other [illegible]

[illegible] described at any point in time [illegible]

(1) Breadth of pene[illegible] quantitative dimension which [illegible] degree or amount of interaction [illegible] takes place in a unit of time. [illegible] measure of breadth is [illegible] amount of interaction per unit time [illegible], an impure

measure of breadth could be the number of topics or subject areas covered by individuals in interaction

(2) *Depth of penetration* is a qualitative dimension which refers to the level or degree of intimacy attained by the parties to an interaction.

Interpersonal interaction, according to the theory, progresses over time through both the breadth and depth dimensions. As Taylor (1965) has pointed out, however, while these dimensions of social penetration are "conceptually related" it is useful to make a distinction between them. Breadth of penetration can be defined separately for interpersonal interaction at *different levels of intimacy*. For example, two people in a relationship may cover the same topics or content areas as those covered by another dyad, but the latter may reach a greater "depth" or level of intimacy in their interactions across these content areas. It is also postulated that, in order for individuals to reach a given level or depth or intimacy of interaction, they must have first interacted in the relationship at more superficial levels. Altman, in fact, suggests that social penetration occurs in a 'wedge-like' manner wherein individuals who have reached the most intimate levels of interaction will still continue to engage in a greater number of super-

[illegible]

relationships, however, [illegible] appropriate levels of [illegible] span, the risk of [illegible] to be known in an extremely intimate [illegible] interaction, probably far outweighs [illegible].

Personality Factors [illegible]tion

As the [illegible] motivation for the development of social [illegible] proposes:

> a concept [illegible] in which the organism [illegible] forward into successively deeper [illegible] penetration, primarily to forward [illegible]. Where does this come from? [illegible] indicates, the organism is hypothe[illegible] extrapolating or forecasting [illegible] out this hypothesis could be [illegible] this forward thrust. Another factor [illegible] would be a reinforcement concept. [illegible] has found the relatio[illegible], in some way he feels compatible [illegible] other person who provides him [illegible]. A reward potential is extrapolated [illegible] to other domains, in which the [illegible] of the reward is greater with [illegible] deeper levels of penetration [illegible] to receive rewards [illegible] the organism moves on to [illegible] of reward which portend additional and more [illegible] satisfaction (p.31).

[illegible] ([illegible]) [illegible] use of the concept of reward value [illegible] interpersonal disclosure as well.

This frequently [illegible] aspect of the "reward [illegible] what is disclosed (conceived within the context [illegible] learning paradigm) suggested the investiga[illegible] individual's responsiveness to reinforcement

[illegible]
Rotter (1966) has argued, for example, that the effects of reward or reinforcement on preceding behavior will be in part dependent upon whether the person perceives the attainment of reward as contingent on his own behavior, or independent of it. The effect of a reinforcer following some bit of behavior is not a simple stamping-in process. According to Rotter:

> A perception of causal relationship need not be all or none but can vary in degree. Where a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this as a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control (p. 1)

Rotter (1966) discusses the similarity of this concept of expectancy for internal versus external control of reinforcement to other concepts. According to Rotter, I-E is similar to alienation in the sense that the alienated individual seems unable to control his destiny. It is interesting to note that Jourard (1964) has linked the concept of alienation from the self to the individual's inability "to make himself fully known to at least one other significant human being"(p.25).

Rotter (1966) reviews research done with an instrument designed for the measurement of individual differences in a generalized expectancy for internal-external control. It is a forced choice, 29-item scale which includes 6 filler items. Reportedly, the scale possesses reasonably high internal consistency, satisfactory test-retest reliability and correlates reasonably well with other methods of assessment of the same variable. Further, discriminate validity is attested to by the low relationships with other variables, e.g., intelligence, social desirability, and liberal, political attitudes.

Generally,research has shown that individuals who score high on the external-control dimension (externalizers) differ from those who score high on the internal-control dimension (internalizers) in several ways. Externalizers tend to behave as though their reinforcements are determined by chance or luck, themselves behaving as if they have no control over the course of external events. They tend to be more passive, more conforming, and less confident of themselves than are individuals who are characterized as internalizers, and they are less likely to utilize past knowledge in new situations. Internalizers, by contrast, tend to behave in ways which are appropriate to situations. They seem to be more capable of dealing with others in an effective manner and place more emphasis on achievement than do externalizers. When they perceive subtle attempts to influence them, as through conditioning, internalizers tend to be resistant. If, however, internalizers are given conscious choices, they tend to act on them (see Rotter, 1966; Lefcourt, 1966).

Based on speculations derived from social penetration theory and self-disclosure research concerning the "trading relationship" which is hypothesized to operate on the basis of learning principles, it would appear that an individual whose locus of reinforcement control is primarily internal would be more willing to engage in depth disclosures *if these are rewarding*, than an individual who is externally controlled. That is, a person(s) who enters such a "trading relationship" and who perceives his behavior as in some way "causally" related to the disclosures of an "other," might conceivably be more willing to participate in a relationship at a deeper level of intimacy, and thus attain greater rewards, than a person who is not aware of this contingency which guides mutual disclosures. This specific personality dimension as it is related to self-disclosure was explored in the present study

Another "personality variable" in social penetration or self-disclosure which is closely related to the "contingency" of *perception of reward or reinforcement*, as discussed above, would appear to be the *personal meaning* attached to self-disclosure by individuals.

More specifically, while several researchers have attempted to assess self-disclosure according to the "average" intimacy scaled meaning of self-disclosure (Taylor, 1965; Altman and Haythorne, 1965; Drag, 1968; Resnick, 1968; Friedman, 1968), to date there is no evidence in the literature which indicates that an individual subject has been asked to assess what a given "bit" of self-revelation means to him in his specific situation. It can be argued, however, that what is considered an "intimate" topic for one individual may be seen as a matter-of-fact disclosure for another. Some support for this notion stems from attempts to scale items for intimacy. Drag (1968), for example, found that ratings of her stimulus items by an independent group of Ss (females) were so disparate that she resorted to using only those items which had received the lowest rating (one) or the highest rating (seven) on her scale. She notes that, "On what might prove to be truly significant questions, there appears to be such a large range of variability that questionnaires end up asking Ss to discuss such extreme items as the weather or sex (p.122)."

✓ This variable of 'personal meaning" assigned by Ss to their own and others' disclosures was investigated in the present study. Specifically, the intimacy value which a given subject assigned to his self-revelations and the revelations of others was investigated in relation to his "normative score" derived from rated values assigned items discussed in the group situation. A major inference concerning the relationship between the intimacy value of one's own and others' disclosures was as follows.

> "When an individual perceives other group members as providing him with self-information which is at least *as intimate* as his own disclosures to the group, he will be willing to continue "trading" with these others. Conversely, when an individual perceives his own disclosures as *more intimate* than the average intimacy of the disclosures provided him by others he will be less willing to maintain the trading relationship.

Thus, one should expect a positive correlation between a favorable ratio of *self-other intimacy of disclosure ratings* and individual self-disclosure score derived from the objectively rated values of stimulus items for each *S*.

Situational Factors in Social Penetration

It is suggested according to social penetration theory that *situational factors* constitute a subset of variables which must be considered as contributing to, or modifying, the process of penetration itself. Two situational variables examined in the present study were *E* behavior and variable group size.

The presence of a business-like *E* in general psychological research has been empirically shown to affect experimental results differentially as compared to the less distant, more congenial *E* In self-disclosure research, experimenter behavior has been shown to influence subject behavior in *E-S* interaction, and to exert a "carry over" effect from *E-S* to *S-S* contacts in a predictable fashion. When the *E* is "open" or self-disclosing, *Ss* tend to be more self-disclosing, both in relation to the *E* and other *Ss*. When the *E* is "closed" or when self-disclosure becomes one-sided, *Ss* tend to disclose less to the *E* and to fellow *Ss*. To date, however, no research has studied this *E* effect in group situations larger than a dyad.*

In the present study, the effect of *E* behavior upon the mean self-disclosure score of *Ss* in groups larger than the usual two-person situation was examined. It was hypothesized that the *E*, through his own self-disclosing or non-disclosing behavior, would serve as a powerful model for *Ss* to imitate. An alternative conceptualization within the context of social penetration theory, was that the *E*, by self-disclosing, provided a strong positive reinforcing agent for the disclosing behavior of experimental *Ss*. Specific expectations for this *E* variable are developed in the next section of this paper.

The second situational variable examined in this study was that of group size. According to the theory of social penetration, the element of personal risk in

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*It should be noted that in Chittick and Himelstein's study (1967), the *E*'s confederates were unknown to *Ss* as confederates.

self-disclosure is such that few persons ever attain the most intimate levels of self-disclosure, even in a dyadic or two-person interaction. Even when this does occur, it takes place only after considerable time has been consumed in interaction. It would seem, then, that the interpersonal "riskiness" of disclosure should be as much dictated by the situational context in which disclosure occurs as by the riskiness inherent in the subject-matter disclosed. If, then, one were to hold the stimulus materials and time factor relatively constant in self-disclosure, then one should expect to find that the size of the group in which an individual finds himself would be a powerful determiner of his level or depth of social penetration. Specifically, one would expect that the smaller, and presumably, more intimate, the group situation in which the individual finds himself, the less would be the *risk* of disclosing personal information, and, therefore, the greater should be the depth of social penetration which the group members would attain. The specific hypothesis for this variable is developed in the next section The group sizes selected were those comprised of 8 *Ss* and *E*, 4 *Ss* and *E*, and 2 *Ss* and *E*.

Hypotheses

I. The specific expectation for the *group size* variable was as follows: As group size diminishes (from eight-, to four-, to two-persons, plus the experimenter), the mean self-disclosure score will show significant increases within a given experimenter treatment condition. Thus, whether the *E* was a participant in the self-disclosure process or not, it was predicted that each successively diminished group size would yield a significantly higher mean self-disclosure score than the group preceding it in size.

II. It was predicted that *E* *behavior* would significantly affect mean group self-disclosure score. Specifically, a group of eight *Ss* with whom the *E* engaged in the self-disclosure process was expected to produce significantly greater mean self-disclosure scores then were eight *Ss* engaged in a group in which the *E* did not disclose; four-person *S* groups in which the *E* engaged in self-disclosure were expected to produce significantly greater mean self-disclosure scores than four-person groups in which the *E* did not disclose, and, two-person *S* groups were expected to produce significantly greater mean self-disclosure scores than were two-person *S* groups in which the *E* did not disclose.

III. It was predicted that *internal control* of reinforcement would be *positively* related to individual self-disclosure scores.

IV. For individual ratings of self-other disclosures, the expectation was as follows: When an individual perceives other group members as providing him with self-information which is *at least* as intimate as his own disclosures to the group, he will be willing to continue "trading" with the group. Conversely, when an individual perceives his own disclosures as more intimate than the average intimacy of the disclosures provided him by the group, he will be less willing to continue "trading." Thus, a positive correlation was expected between a favorable ratio of self-other intimacy of disclosure ratings and individual self-disclosure scores (derived from the rated value of the stimulus items).

Finally, the writer was interested in examining the manner in which *Ss'* questionnaire claims would predict actual self-disclosing behavior, but did not feel that he had sufficient data to make specific predictions about what differences, if any, might exist. The following question was investigated to provide the desired information.

Question 1. Can Ss' self-disclosing behavior in the group situation be predicted from their questionnaire responses?

CHAPTER II

METHOD

Subjects

Seventy-two male students enrolled in undergraduate psychology courses at the University of Florida were selected to participate in the experiment on the basis of their scores on a 15-item Self-Disclosure Questionnaire (described below). Because of the reported group differences found in previous questionnaire research (Jourard, 1961 b, Jourard and Lasakow, 1958; Plog, 1963; Jourard, 1961 d) Negro men, Jewish men, and non-native-born Americans were excluded from participation in the present study.

Fifty-nine single males enrolled in one of five different psychology courses, and 13 married males from one of these courses were then selected from a total subject pool (males in the five courses to whom the questionnaire was administered) which numbered 115 students. Prior to pooling Ss, a one-way analysis of variance was performed on Ss' questionnaire scores. Ss were separated according to the course from which they were drawn, and married Ss from the one course were categorized into a distinct group. This yielded four separate categorizations by course enrollment, and one category for married students.

Bartlett's Test for homogeneity of variance across these 5 groups yielded a non-significant χ^2 ($1.8 < \chi^2_{.90} = 7.78$, df=4) and the null hypothesis of equal variances was accepted. Results of the subsequent analysis of variance are represented in Table 1. With .10 chosen as the level of significance, the obtained F-ratio was not significant, and it was concluded that the means of these five groups did not differ.

TABLE 1

ANALYSIS OF VARIANCE OF SUBJECTS'
SELECTION QUESTIONNAIRE SCORES BY GROUPS

Source	Sums of Squares	df	Mean Square	F	p
Between Groups (Courses & Married *Ss*)	24.50	4	6.13	1.43	.25 (N.S.)
Within Groups (Error)	471.85	110	4.29		

A mean and a standard deviation were then computed for the total group of 115 *Ss*, and those men whose scores fell within one standard deviation above or below the mean were selected for participation in the study. This procedure was followed in an attempt to rule out individuals who possessed atypical tendencies toward extreme openness or closedness in self-disclosure. Scores of this final group of *Ss* ranged from a median scale value of 6.40 to 9.92. The final distribution of scores was negatively skewed, indicating that a large portion of Ss claimed to be higher disclosers than might have otherwise been expected. Finally, Ss were matched by groups. No S was placed into a group with any other S with whom he claimed some prior personal acquaintance. All Ss, then, in each of the groups were relative strangers to one another.

In the matching procedure (placing Ss into variable-size groups), the item with the highest median value checked by each S on the Self-Disclosure Inventory was taken as his "claimed" self-disclosure or penetration score. Table 2 shows the cell means and variances for each of the groups x experimenter conditions. It should be noted that in computing these means, the individual replications for each group x experimenter condition were "collapsed" and the means in the table are based upon the total number of Ss in that cell. The number of replications within each cell in Table 2 is in parentheses.

TABLE 2

CELL MEANS AND VARIANCES FOR GROUPS MATCHED ON BASIS OF SELECTION QUESTIONNAIRE CLAIMS

Group Size	E Disclose Condition	E No-Disclose Condition
(8)	$\bar{X}=8.29$, N=16 (2 Reps) $s^2 = 1.51$	$\bar{X}=8.37$, N=16 (2 Reps) $s^2 = 1.46$
(4)	$\bar{X}=8.15$, N=12 (3 Reps) $s^2 = 2.33$	$\bar{X}=8.30$, N=12 (3 Reps) $s^2 = 2.03$
(2)	$\bar{X}=8.46$, N= 8 (4 Reps) $s^2 = 2.15$	$\bar{X}=8.46$, N= 8 (4 Reps) $s^2 = 2.15$

Bartlett's test for homogeneity of variance yielded a non-significant χ^2 ($1.41 < 9.2 = \chi^2_{.90}$, df=5). A 2 x 3 analysis of variance yielded no significant column differences ($F = .05$) or row differences ($F = .17$) among means.

Materials

Self-Disclosure Questionnaire. A fifteen-item questionnaire with items scaled for intimacy by a Thurstone-like procedure was utilized in the selection of experimental Ss, while an alternate form of this questionnaire was used as a schedule of disclosure items in the actual experiment (described later). Items included in both forms of the questionnaire were drawn from a total pool of 671 intimacy-scaled items (Taylor and Altman, 1966). This pool of items was scaled by a sample of 50 male freshman students at a northern university and it was reasoned that they would be representative of the college students utilized as Ss in the present experiment.

Items included in both forms of the self-disclosure questionnaire were chosen from this larger pool on the basis of their possessing reasonably high reliability ($Q \leq 2.64$) and on the basis of their representing a range of intimacy values, from very low intimacy to extremely high intimacy. The selection questionnaire was comprised of items ranging in intimacy from 1.23 (item 1) to 10.69 (item 15), while the experimental schedule items ranged in intimacy, from 1.[illegible] The items in both schedules were arranged sequentially from the least intimate to the most intimate. Five items (numbers 6, 7, 8, 9, [illegible]) were included in both forms of the self-disclosure questionnaire. Items were considered as equivalent, and therefore alternates, if they possessed the same (or almost identical) scale value and Q-value. No attempt was made to equate subject-matter when these items were selected.

The 15-items which comprised the selection questionnaire, along with instructions to the subject are included in Appendix A. Item scale values and Q-values are in parentheses following each item. The score for each S was his indicated willingness to disclose to a small group of same-sex strangers, as indicated by the intimacy value of the last item checked.

The 15 items used as a schedule in the experiment proper are included in Appendix B. Item scale values, and Q-values, are in parentheses following each item. Each S's score in the experiment was the sum of the intimacy values of those items which he had talked about or shared with the group.

The Self-Other Intimacy of Disclosure Rating Scale. This instrument was comprised simply of a series of seven-point rating scales (range: 0=no answer, to 7= very intimate) and was used in the experiment proper to [illegible] each S's average ratings of his own disclosures, and that S's average ratings of the disclosures of his fellow Ss. The instrument contained 15 item [illegible] one for each item of the self-disclosure schedule, under each of which appeared eight, four, or two (depending upon the size of the group) 7-point scales for making ratings of one's own, and one's fellow Ss' disclosures. The form of the instrument utilized in the E-Disclose condition also included a scale for each S to make ratings of E's disclosures. A copy of this instrument is included as Appendix C.

The score yielded by the scale was derived from the self-other ratings made by each S as follows. For each S the self-rating for each item answered was divided by the average ratings given to the other S(s) who answered that item. The sum of all these individual item ratios was then divided by the total number of items answered by the S. This yielded a number somewhat above or below 1.00 for all Ss. Ss' self-other ratings, were then correlated by the Pearson method with their total self-disclosure scores (derived by summing the intimacy values of all items answered) in the experimental setting

Rotter's scale for the measurement of Internal vs. External Locus of Control of Reinforcement. The I-E scale is discussed in Chapter I. It is a paper and pencil scale designed to measure internal-external control for each S on the basis of his responses to 29 pairs of statements, six of which are filler items. The scale was administered to each S prior to his entrance into the experimental situation. A copy of the scale, directions for administration, and the scoring key are included in Appendix D.

Apparatus

Eight double-throw toggle switches, and eight jeweled lights were used to construct a "signal apparatus" for use during the experiment. Each of the eight chairs in the room in which the experiment was conducted had a switch attached to the arm. While labeled for both a "yes" and "no" position, each switch was "live" only in the "yes" position. Each of the switches was wired to a jeweled light on a panel in front of the E. This apparatus was used during the experiment to allow the E to record each S's commitment to disclose or not to disclose himself on the items on the Self-Disclosure Questionnaire. The purpose of this arrangement was to prevent Ss from "conforming" in their commitments to answer the self-disclosure items, as, it was speculated, they would have done had the E simply asked for a show of hands or a simple verbal commitment. This is explained more completely in the procedure section.

Experimental Design

A 2 x 3 factorial design was utilized in testing *Experimenter behavior* (disclosing vs. nondisclosing) and *Group size* (8-member vs. 4-member vs. 2-member). Sixteen *Ss* were tested under each of the 8-person - experimenter behavior combinations; 12 *Ss* were tested under each of the 4-person - experimenter behavior combinations, and 8 *Ss* were tested under each of the 2-person - experimenter behavior combinations. This resulted in an uneven numbers, uneven replications design.

Independent Variables. In the present study, *Experimenter behavior* was one of the independent variables which, it was hypothesized, would significantly affect the mean group self-disclosure score. It was proposed that the *E*, through his own self-disclosing behavior would serve as a model or strong positive reinforcing agent for the members of each group, thus enhancing their willingness to disclose, and their self-disclosure scores. Specifically, in those groups in which the *E* was open, it was expected that the mean self-disclosure score of the group members would be significantly greater than in a group of corresponding size in which the *E* was nondisclosing.

Group size, the second situational variable under consideration in this research, was also expected to significantly affect group self-disclosure scores.

It was hypothesized that each successive decrease in group size (8-, 4-, 2-persons) would yield a significantly greater mean self-disclosure score than the preceding larger group.

Experimental Procedure

The experimental procedure is divided into two phases the selection of Ss, and the group self-disclosure process.

Phase One

Selection of Ss and Assignment to Groups

The 72 Ss who were finally selected to participate in the present study met with the E as members of several separate groups. Thus, the selection questionnaire was administered to Ss either during classroom hours, or at a pre-assigned placed which was noted on an experimental sign-up list. All Ss received the same information about the E and the experiment. Prior to administration of the questionnaire, E introduced himself, and gave Ss an estimate of the participation time which would be required of them in the second phase of the experiment. The Ss were informed at this time that not all of them would be selected for further participation in the experiment, but that they would be notified, in any event, to enable them to make arrangements for earning experimental credit in some other study.

The men were then administered the selection form of the 15-item Self-Disclosure Questionnaire. They were asked to indicate by checking in one column next to the items, the information which they would be willing to share with a group of same-sex, same-age strangers. The questionnaire included spaces for *Ss* to write the names of their two closest male friends who were also enrolled in the course with them. This information was utilized in the matching procedure to ensure that *Ss* in a given group were strangers to one another. Information about race, nationality, religious affiliation, and age were also obtained at this time.

After scoring the questionnaires, *Ss* who met the previously-specified criteria were assigned to one of 18 treatment groups (8-, 4-, or 2-person). Regardless of the *E* treatment condition, *Ss* interacted in groups with the *E* present, along with 7,3, or 1 other *S*(s).

Phase Two

Self-Disclosure in the Group Situation

The role of the *E* during the self-disclosure process was performed by a co-experimenter who was naive with regard to the purpose, hypotheses and theoretical rationale of the experiment. This *E* had been thoroughly familiarized with the experimental procedure, and was chosen because of his previous experience with psychological research as an undergraduate psychology major. The "double blind" procedure utilized in the present research was instituted in an attempt to rule out the possibility that any differences between the groups of *S*s receiving different *E* treatments could be attributed to foreknowledge or expectations of the *E*, and concomitant attitudinal or behavioral differences (other than those differences dictated by the design itself). It should be noted, however, that the criteria for a "total blind" (see Rosenthal, 1967) were not met in the present research, since the writer did have previous contact with his *S*s during the questionnaire administration phase, and just prior to the actual self-disclosure process.

The Experiment. Subjects in 8-person groups, reporting to the experiment at the time assigned for them, were asked to seat themselves in a random fashion in any of eight armchairs arranged in a semi-circle. A table, behind which sat the *E*'s co-experimenter, formed the remainder of this circle. *S*s in the 4-person groups were asked to seat themselves in chairs two, four, six and eight *S*s in the 2-person groups were seated in chairs two and six Other than this change in seating arrangements, the remainder of the experimental procedure is identical for the 8-, 4-, and 2-person situations.

Attached to the right arm of each of the chairs, there was a double-throw toggle switch with the positions labeled "yes" and "no." For successive chairs, the "yes" position was alternated, such that the direction of the switch would be the exact opposite for *S*s seated in [illegible]. Each of these switches was wired [illegible] to a panel on the E's table. The [illegible] jeweled lights, labeled such that the E [illegible] which Ss indicated "yes" or "will disclose" [illegible] items of the self-disclosure schedule [illegible] of the study. (The use of the signal [illegible] schedule will be described later in [illegible]

[illegible] here that an attempt was made to control for [illegible] amount of time which was spent in the room by the different sized groups. This was done by recording the time spent by one of the larger groups, and then by keeping Ss in the smaller groups waiting an amount of time (calculated according to the number of group members), while the writer and his co-experimenter pretended to engage in preparations for the experiment in an adjacent room with the door open. Ss in these groups were asked not to talk to one another, but rather to study or just sit quietly. This attempt was largely unsuccessful, however, since some of the smaller groups (notably the 4-person groups) then took an amount of time to complete the experiment which was equivalent to that of the 8-person groups. This, then, resulted in their spending as much as 15 to 20 minutes longer in the experimental situation than did the larger groups. Total time varied from approximately 1-1/2 hours to 2 hours, 15 minutes.

[illegible]

[illegible] sheet of paper [illegible]. The Rotter que[illegible] passed out to [illegible] a[illegible]:

> You [illegible] a questionnaire and [illegible]ions on the front of [illegible] self-explanatory. Please [illegible], and after you have done [illegible] each of the items on the [illegible] make no marks on the [illegible]lves.

After Ss had finished [illegible] questionnaires, they were collected. Sub[illegible] instructed as follows:

> This is a [illegible]osure during the acquaintance [illegible] you know, my name is Mr. ___ [illegible] seated here is Mr. ___ [illegible]er. He will be conducting [illegible] with you after I leave the room. [illegible] like for all of you to pick up [illegible] 15 cards which have been placed [illegible] on the arm of your chair. Will you please look at the first card, the card with the number 1, and read the item printed on it.

Subjects were asked to refrain from reading any but the first self-disclosure item in the packet of 15 cards. The items in this packet were arranged by number from least intimate to most intimate, and were numbered one through 15. The instructions continued as follows:

> I would like to ask you to decide right now whether or not you would share the information described by the item. If you have decided that you will share this information with the other members of the present group, then would you signal 'yes' by turning the switch at the

> [illegible] signal [illegible] t arm [illegible] chair [illegible]

[illegible] all *Ss* had made their [illegible] disclose or not [illegible] disclose the informat[illegible] which had been recorded by [illegible], *Ss* were told the following:

> This is the proce[illegible] be following for the [illegible] experiment. The packet of cards [illegible] you has contained [illegible] You will be instructed [illegible] consider whether or not yo[illegible] to share that information [illegible] group, and then, after having [illegible] decision for each item, [illegible] upon each of you who [illegible] ask you to talk about the information *here and now*. It should be understo[illegible] no one *has* to reveal the personal information [illegible] for in any of these items. [illegible] purpose of the signal apparat[illegible], once you have had time to cons[illegible], and if you subsequently make [illegible] "yes" commitment, you must share that information with the group. Are there any questions?

If *Ss* had no questions, the *E* then passed out the Self-Other rating scale to all *Ss*. They were then instructed in the use of this instrument during the experiment. These instructions, along with a copy of the scale are included as Appendix C.

After the *Ss* had been instructed in the use of the Self-Other rating scale, the writer left the room. The co-experimenter (hereafter referred to as the *E*) then conducted the experiment as follows. *E* first reques[illegible] last na[illegible], E then referred to the [illegible] previously recorded Ss' commitments [illegible] the self-disclosure schedule, [illegible] appears as Appendix E)

E [illegible] to his left, for whom he had r[illegible] commitment to disclose, begin the sel[illegible] by revealing the information of item 1 [illegible] group. When this first S had disclosed, E reminded [illegible] take their ratings, and he then designated the second S to his left for whom he had recorded a positive commitment to disclose. This same procedure was followed for all subsequent Ss for whom the E had recorded a positive commitment for item 1. The movement always proceeded in a clockwise direction.

After all disclosures had been made by those Ss who had indicated positive commitment on item 1, the E asked the Ss to read the second item of the self-disclosure schedule. When this was completed, E again requested that the Ss indicate, by turning the switch on their chair arms to the "yes" or "no" position, whether or not they would reveal the information of item 2 to the group. After recording the Ss' commitments, the E again proceeded around the room (in a clockwise direction) designating those Ss who had agreed to talk about item 2 [illegible] disclosure was designated as [illegible] left of the *S* who began [illegible] item 1. By following this procedure [illegible] initial discloser was a different *S* [illegible] item (barring the situation [illegible] disclosed first on the preceding [illegible] to make a positive commit[illegible] item).

This [illegible] followed for all 15 items of the self-[illegible]. If all *S*s indicated a negative commitment [illegible] given item, *E* simply moved on to the [illegible].

The only [illegible] procedure, regardless of the size of the [illegible] in the condition of the experiment wherein [illegible] *S* [illegible] part in the self-disclosure process [illegible], a simple rule was followed: the *E* disclosed [illegible] of the 15 items in the self-disclosure [illegible] as there was at least one *S* who had indicated positive commitment for the item(s). In these *E*-disclose groups, the experimenter always revealed information last. The [illegible] co-experimenter was instructed to be honest in his disclosures, while at the same time maintaining a relatively constant response for each item across all groups. By the co-experimenter's self-report, his responses changed little from group to group either in content or duration.

When the Ss in a given group had completed the 15 items of the self-disclosure schedule, the self-other rating scales were collected, and Ss were shown into a room where the writer was waiting. All Ss were then given a brief post-experimental interview, and then were informed as to the purpose of the experiment. It was requested that they not divulge any information about the experiment to fellow Ss whom they knew to be awaiting their turn at participation.

CHAPTER III

RESULTS

[illegible] effects of [illegible] on [illegible] "situational" [illegible] non-d[illegible] (person) were [illegible] according to the hypo[illegible] section of this paper. The "[illegible]" [illegible] internal vs. external locus of reinforcement [illegible], and *Ss*' perceptions of [illegible] of own [illegible] peers' disclosures were hypothesized to relate to self-disclosure in specified ways. [illegible] questionnaires as instruments for [illegible] of self-disclosing behavior was [illegible]

The resul[illegible] in four sections. The first of these will [illegible] effects of the two independent variables of *E*-behavior and group size upon the dependent variable, mean group self-disclosure. Section two will be devoted to the independent variable of internal-external locus of reinforcement control as it relates to the dependent variable of individual self-disclosure, while the t[illegible] self-

Other ratings of the in[illegible]

individual self-disclosure [illegible]

the findings concerned with [illegible]

disclosing behavior through [illegible]

Situational Variables and S[illegible]

The hypotheses wi[illegible] of group size and E-behavior [illegible]

> Hypothesis I. As group size decreases (from eight, to [illegible] to two-[illegible] one) the mean group self-disclosure score will show significant increases within a given experimenter condition. Thus, whether the E was a participant in the self-disclosure process or not, it was predicted that each successively diminished group size would yield a significantly higher mean self-disclosure score than the group preceding it in size.
>
> Hypothesis II. Experimenter behavior will significantly affect mean self-disclosure scores. Specifically, groups with whom the E engages in self-disclosure will produce significantly greater mean self-disclosure scores than will same-size groups with whom the E does not engage in self-disclosure.

Analysis of Self-Disclosure Scores. Each S's total self-disclosure score was derived by summing the intimacy (scale) value of the self-disclosure items which he talked about in the group situation. This method for deriving scores was selected when preliminary analysis of the data indicated that the total score for each S more nearly described his behavior than did the value of the highest item answered (as used in the selection and [illegible].

A 2 [illegible] to examine the effects of [illegible] (disclosing vs. nondisclosing) and *group size* ([illegible] 4 vs. 2-persons) on self-disclosure. Table 3 summarizes the results of the analysis of variance.

TABLE 3

SUMMARY OF THE ANALYSIS OF VARIANCE
FOR THE EFFECTS OF GROUP SIZE AND
EXPERIMENTER BEHAVIOR ON SELF-DISCLOSURE

Source	Sums of Squares	df	Mean Square	F	p
Group Size	4969.13	2	2484.56	13.25	$<.01$
E-Behavior	643.76	1	643.76	3.43	$>.05, <.10$
Group Size x *E*-Behavior	1043.78	2	521.89	2.78	$>.05, <.10$
Error	12372.18	66	187.46		

The independent variable *group size* significantly affected mean self-disclosure as hypothesized ($p < .01$), and the independent variable of *experimenter behavior* approached significance at the .05 level of probability ($.05 < p < .10$). The interaction between group size and *E*-behavior, however, also approached significance at the .05 level ($.05 < p < .10$), and dictated an examination of the simple main effects. The nature of the interaction effect is indicated by examina-

[illegible] cell means for experimental conditions given in Table 4.

TABLE 4

MEANS OF SELF-DISCLOSURE
SCORES BY EXPERIMENTAL CONDITIONS

Group Size	$\underline{E}$ - Disclose	$\underline{E}$- No-Disclose
8-Person	$\overline{X}$ = 57.65 (N=16)	60.21 (N=16)
4-Person	$\overline{X}$ = 85.54 (N=12)	68.89 (N=12)
2-Person	$\overline{X}$ = 79.63 (N= 8)	75.04 (N= 8)

From an inspection of Table 4, it can be seen that the mean self-disclosure scores increased in the predicted direction (8- to 4- to 2-person groups) in the condition of the experiment in which the $\underline{E}$ did not participate in the self-disclosure process. Subjects in these groups disclosed more as group size decreased. In the $\underline{E}$-disclose condition, however, $\underline{S}$s in the 4-person groups attained the highest mean self-disclosure scores, with scores in the 2-person groups, and 8-person groups decreasing in that order.

Figure 1 and Figure 2 depict the arrangement of these cell means graphically. Figure 1 shows the simple effects of $\underline{E}$-behavior on self-disclosure for each group size, while the diagram in Figure 2 shows the simple effects of group size on self-disclosure for each $\underline{E}$-condition. Figure 2 clearly indicates that mean self-disclosure scores decrease in the linear fashion predicted when the E does not participate in the self-disclosure process. When E-discloses, however, this relationship does not hold.

SIMPLE EFFECT OF EXPERIMENTER
BEHAVIOR FOR EACH OF THE GROUPS

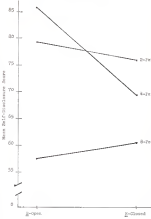
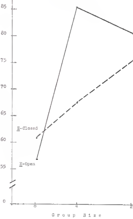


FIGURE 2

SIMPLE EFFECTS OF GROUPS FOR EACH EXPERIMENTER CONDITION



Duncan's Multiple Range Test was employed to test the significance of the differences among the six means. The form of this test used was that illustrated by Duncan (1957) for comparisons among means based upon unequal numbers of observations. The modified test incorporates an adjustment factor which yields an adjusted difference between any two such means. The studentized significant ranges for the test were taken from a table of ranges computed for alpha equal to .05. The results of the multiple range test are shown in Table 5.

TABLE 5

DUNCAN MULTIPLE RANGE TEST
FOR COMPARISONS AMONGST CELL MEANS

Groups	Groups from which mean score is significantly different.
8-person, *E*-Disclose	2-person, *E*-Disclose, 4-person, *E*-disclose, 2-person, *E* No-Disclose, 4-person, *E* No-Disclose.
4-person, *E*-Disclose	8-person, *E*-Disclose, 8-person, *E* No-Disclose, 4-person, *E* No-Disclose.
2-person, *E*-Disclose	8-person, *E*-Disclose, 8-person, *E* No-Disclose.
8-person, *E* No-Disclose	2-person, *E* No-Disclose, 4-person, *E*-Disclose, 2-person, *E*-Disclose.
4-person, *E* No-Disclose	4-person, *E*-Disclose, 8-person, *E*-Disclose.
2-person, *E* No-Disclose	8-person, *E*-Disclose; 8-person, *E* No-Disclose.

These differences indicate only partial support for Hypotheses I and II. In those groups of decreasing size (from 8- to 4- to 2-person) in which the E did not participate in the self-disclosure process, the mean amount of self-disclosure increased in a linear fashion, as predicted. However, while the means of the 8-person and 2-person groupings are significantly different, the mean of the 4-person groupings is not different from the mean self-disclosure scores of Ss in the 8- or 2-person group sizes.

In groups of decreasing size in which the E participated in the self-disclosure process, the 8-person situation produced the smallest amount of self-disclosure, as predicted. In this E condition, the 4-person S groupings produced significantly greater mean self-disclosure scores than did the Ss in the 8-person groupings, again as expected. The difference between the mean of the 4-person groups and the 2-person groups, however, while not significant, indicated a trend toward more self-disclosure in the larger group size in this experimenter treatment condition. Overall, then, these means showed a non-linear trend.

E-behavior produced no significant differences between the means of the two 8-person groupings or the two 2-person groupings. However, whenever the E participated in the self-disclosure process in the 4-person groups, it produced significantly greater mean self-disclosure than occurred in those 4-person groups in which the E did not disclose.

Replications and Experimenter Behavior

Due to the uneven number of replications of the various group-size conditions, the possible effect of replications was not taken into account in the overall Groups x E-behavior analysis of variance It was decided, therefore, to conduct one-way analyses of variance between replications, within each of the six experimental conditions or treatment combinations The level of significance for all F-ratios was set at alpha equal to .05 The results of the analysis of variance for the replications in the 8-person, E-Disclose condition yielded a non-significant F, indicating no difference in mean self-disclosure scores between the two groups. Table 6 summarizes the results of the analysis of variance.

TABLE 6

SUMMARY OF THE ANALYSIS OF VARIANCE
FOR THE EFFECT OF REPLICATIONS IN THE
8-PERSON, E-DISCLOSE TREATMENT COMBINATIONS

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	124,69	1	124.69	1.10	>.25(N.S.)
Error	1583.876	14	113 13		

For 8-person groups in which the E did not self-disclose, analysis of variance yielded an F-ratio of 9.52 which was significant beyond the .01 level, indicating differences in replication means. The summary of this analysis is shown in Table 7.

TABLE 7

SUMMARY OF THE ANALYSIS OF VARIANCE FOR
THE EFFECT OF REPLICATIONS IN THE 8-PERSON,
E-NO-DISCLOSE TREATMENT COMBINATION

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	1005.21	1	1005.21	9.52	.01
Error	1478.61	14	105.62		

Analysis of variance for the effects of replications in the 4-person, E-Disclose treatment combination yielded a non-significant F-ratio, again indicating no replications effect. This analysis is summarized in Table 8.

TABLE 8

SUMMARY OF THE ANALYSIS OF VARIANCE FOR
THE EFFECT OF REPLICATIONS IN THE 4-PERSON,
E-DISCLOSE TREATMENT COMBINATION

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	81.47	2	40.74	1.00	>.25(N.S.)
Error	366.64	9	40.74		

For the replications within the 4-person, E-No-Disclose treatment combination, the obtained F was significant at the .025 level, indicating a mean difference in self-disclosure across the three groups. This analysis is summarized in Table 9.

TABLE 9

SUMMARY OF THE ANALYSIS OF VARIANCE FOR
THE EFFECT OF REPLICATIONS IN THE 4-PERSON,
E-NO-DISCLOSE TREATMENT COMBINATIONS

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	1453.73	2	726.86	6.14	.025
Error	1065.39	9	118.3		

Table 10 summarizes the results of the effects of replications in the 2-person, E-Disclose treatment combination. No significant difference in self-disclosure scores between replications is indicated by the obtained F.

TABLE 10

SUMMARY OF THE ANALYSIS OF VARIANCE FOR
THE EFFECT OF REPLICATIONS IN THE 2-PERSON,
E-DISCLOSE TREATMENT COMBINATION

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	587.47	3	195.82	3.67	>.10
Error	213.62	4	53.41		

[illegible] treatment combina[illegible] re effect of replicatio[illegible] 6.44, which almost reached significa[illegible] (Table F for 3, 4 df = 6.59) Th[illegible]ed in Table 11.

[illegible]

SUMMARY OF [illegible] ANCE FOR
THE EFFECT OF [illegible] IN THE 2-PERSON,
E-NO-DISCLO[illegible] TREATMENT COMBINATION

Source	Sums of Squares	df	Mean Square	F	p
Between Replications	3653.88	3	1217.96	6.44	< .10
Error	756.99	4	189.25		

In summary, in those E treatment combinations in which the E engaged in self-disclosure with the Ss, there appeared no significant differences in the mean self-disclosure scores attributable to replications. In those treatment combinations of the experiment in which the E did not self-disclose, significant differences occurred between replications in the 8-person, and the 4-person groups, while replications of the 2-person situation barely missed yielding a significant F-ratio.

Internal vs. Ex[illegible] Reinforcement Co[illegible]

Hypothesis III: Internal [illegible] reinforcement control will [illegible] related to individual self-[illegible] score.

A test of Hypothesis III was [illegible] computing Pearson product-moment corre[illegible] for all Ss receiving the same trea[illegible]. This, then, yielded six correlation c[illegible] between I-E scores and total individual self-disclosure scores for all Ss in each of the six treatment groups. Because the I-E scale is scored in the direction of externality, a significant negative correlation is necessary for the acceptance of Hypothesis III as it is stated.

Inspection of scatter diagrams of the raw data for each of the six groups indicated no reason to suspect non-linearity of the obtained data. The Pearson product-moment correlation coefficients, based upon different numbers of Ss in each of the treatment combinations, are shown in Table 12.

TABLE 12

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS
BETWEEN INTERNAL CONTROL OF REINFORCEMENT AND
INDIVIDUAL SELF-DISCLOSURE SCORES FOR SUBJECTS
IN THE SIX TREATMENT COMBINATIONS

	E-Disclose	E- No-Disclose
3-Person Groups (N=[illegible])	-.05	-.16
4-Person Groups (N=[illegible])	.01	.64*
2-Person Groups (N= 3)	-.23	-.24

*Significant at the .05 level

Only one of the six r's is significant at the .05 level, and r = + .64 is in the direction opposite that which was predicted. For subjects in this treatment combination (4-person, E-No-Disclose), externality appears to be related to increased self-disclosure. For Ss in three of the other groups, low r's were obtained which were in the predicted direction, but did not approach significance. Hypothesis III, then, was not supported.

Individual Ratings of Self-Other Disclosures And Continued Trading in Self-[illegible]

For individual ratings of self, and of other disclosures, the following [illegible] were developed.

> Hypothesis IV. When an individual perceives other group members as providing him with self-information which is at least as intimate as his own disclosures to the group, he will be willing to continue trading with the group. Conversely, when an individual perceives his own disclosures as more intimate than those provided him by the group, he will be less willing to continue "trading."

A test of this hypothesis was conducted by computing Pearson product-moment correlation coefficients, for all Ss receiving the same treatment combinations. This again yielded six correlation coefficients, one between individual total self-disclosures and Ss' ratings of their own and their fellow Ss' disclosures. Construction of scattergrams again indicated that the obtained data were linear in fashion. The score for each S on the Self-Other Rating Scale was derived as follows: for each S the self-rating for each item answered was divided by the average ratings given to the other Ss who answered that item. The sum of all these individual item ratios (converted to decimal equivalents) was then divided by the total number of items answered by the S. This yielded a number somewhat above or below 1.00 for all Ss. This score was then utilized with each S's corresponding self-disclosure score to obtain the correlation coefficients shown in Table 13. Because of the nature of the self-other ratings, [illegible] less than one would be considered a favorable ratio of self - to other disclosures. The correlation coefficient between self-disclosure scores and self-other ratings then would have to be negative to support Hypothesis IV.

TABLE 13

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS
BETWEEN SELF-OTHER RATINGS OF SELF-DISCLOSURE
AND INDIVIDUAL SELF-DISCLOSURE SCORES FOR SUBJECTS
IN THE SIX TREATMENT COMBINATIONS

	_E_-Disclose	_E_-No-Disclose
8-Person Groups	42 (N=15) N S	12 (N=16) N S.
4-Person Groups	.41 (N=12) N.S.	15 (N=11) N.S.
2-Person Groups	.63 (N= 8) N S.	.40 (N= 8) N S

As seen from Table 13, none of the correlation coefficients reached significance when .05 was set as the level of probability, although one, that for _Ss_' self-other ratings in the 2-person, _E_-disclose treatment combination, approached significance. The sign of all correlation coefficients is positive, opposite the direction of that predicted. Hypothesis IV then was not supported, there is some evidence from the directionality of the correlations that the opposite relationship between self-other ratings and self-disclosure might be tenable.

Questionnaire [illegible] Behavior

Question 1: [illegible] self-disclosing behavior in [illegible] situation be predicted from t[illegible] questionnaire responses.

This question was [illegible]gated by computing Pearson product-moment correlation coefficients between the selection criterion scores (highest scale value checked by each *S*) and the total self-disclosure score in the group situation for all *S*s receiving the same treatment combinations. The correlation coefficients are presented in Table 14.

TABLE 14

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN SELECTION SCORES AND TOTAL INDIVIDUAL SELF-DISCLOSURE SCORES FOR *S*s IN THE SIX TREATMENT COMBINATIONS

	E-Disclose	*E*-No-Disclose
5-Person (N=16)	.04	-.01
4-Person (N=12)	.36	-.07
2-Person (N= 8)	.07	.38

None of the correlation coefficients is significant at the .05 level. Only two of the r's, that for the 4-person, *E*-disclose treatment combination, and that for the 2-person, *E*-No-disclose treatment combination, showed a trend toward a positive relationship between *S*s' questionnaire claims, and their actual self-disclosure [illegible] to be [illegible] to a [illegible] actually do [illegible].

CHAPTER IV

DISCUSSION

The present research was intended to extend the investigation of "situational" and "personality" variables as parameters of influence on self-disclosure when the latter is viewed as ongoing behavior. The question of the manner in which questionnaires predict actual self-disclosing behavior was also considered.

Situational Variables and Self-Disclosure: Hypotheses I and II

The two independent variables under consideration in this portion of the study were Group Size and Experimenter Behavior in relation to mean group self-disclosure score. The expectations for each of these variables were only partially borne out. It was shown that the situation variable of group size did significantly affect mean self-disclosure, while the E-behavior variable approached significance at the .05 level of confidence. A near-significant interaction between the two variables indicated that the self-disclosure mean scores showed a very strong tendency to vary by experimenter behavior according of various-sized groups of *Ss*. Subsequent analysis revealed that for Ss participating in groups of different size, in which the experimenter remained an anonymous observer of the self-disclosure process, that the group variable operated largely as hypothesized. Self-disclosure was shown to relate to decreasing group size in a positive, linear fashion. The means were significantly different, however, only for the two extreme group sizes. For 4-person groups, the mean self-disclosure score did not differ significantly from those of the 8- or the 2-person groups.

In the groups of various size in which the experimenter participated in the self-disclosure process, the 8-person groups produced the smallest amount of self-disclosure, the mean self-disclosure score of these groups being significantly different from both the 4-person and the 2-person means. In this experimenter treatment condition, however, there was a definite non-linear trend in the arrangement of 4-, and 2-person group means by order of magnitude, with the smaller group size yielding a smaller mean score. While the difference between the means of these two smaller group sizes was not statistically significant, inspection of the raw data reveals that a significant difference may well have been precluded by the limitations of the self-disclosure scale itself. In two of the three replications of the 4-person situation, *Ss* answered all 15 items of the schedule, while in the third replication, one *S* refused to answer 3 of the items, one of which possessed a low value, while two others were high value items. Thus, 11 out of 12 *Ss* answered all items of the self-disclosure schedule in the 4-person situation. By way of contrast, 3 of the 8 *Ss* in the 2-person groups refused two items, all of very high intimacy value. The percentage of *Ss* in each of these two groups who answered each of the 15 items of the self-disclosure schedule is shown in Figure 3. Percentages of *Ss* by items in the 8-person, *E*-Disclose group is included in the figure for purposes of comparison. Figure 4 shows the percentage of *Ss* responding to each item in the 8-, 4- and 2-person, *E*-No-Disclose treatment combinations.

From the curves in Figure 3, it can be seen that the groups differed only in the refusal of one item (No. 3) by one *S* in the 4-person grouping, with all *Ss* in both groups answering items 1, 2, 4 - 12. Then, at the upper extreme of the scale, *Ss* in the 2-person situation began refusing to answer a relatively

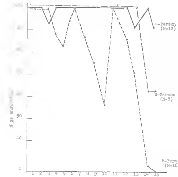


FIGURE 3

PERCENTAGE OF Ss IN THE 8-PERSON, 4-PERSON AND 2-PERSON-E-DISCLOSE TREATMENT COMBINATIONS ANSWERING EACH OF THE ITEMS IN THE SELF-DISCLOSURE SCHEDULE

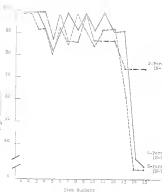


FIGURE 4

PERCENTAGE OF Ss IN THE 8-, 4-, AND 2-PERSON E-NO-DISCLOSE TREATMENT COMBINATIONS ANSWERING EACH OF THE ITEMS IN THE SELF-DISCLOSURE SCHEDULE large percentage of the time, as contrasted with the percentage of refusals in the 4-person situation.

Just what this tendency towards increased disclosure in the 4-person group might mean is unclear. One can begin to speculate about the effects of experimenter behavior enhancing a feeling of 'camaraderie" in the 4-person groups which is absent in the larger 8-person group or the smaller 2-person situation. Or, perhaps the act of self-disclosing is enhanced in this situation by some moderate level of risk which is anxiety producing enough to be optimally motivational for modeling or "learning" from another (the E) to occur. By contrast, in the E-No-Disclose situation, the risk (and, if the preceding is correct), the motivation level may be optimal in the 4-person group, but Ss must project their own model of E's expectations onto the situation.

On the other hand, the 8-person situation may be one in which self-disclosure becomes too "public" while in the smaller 2-person groups self-disclosure is too "private" and, therefore, safe. In the former situation, one may be assuming the chance of risking a [illegible] onset [illegible] large [illegible] In [illegible] One can [illegible] al research [illegible] the general [illegible] may become [illegible] be disclosed by the E. [illegible] support from the findings that [illegible] in which the E disclosed, the mean self-disclosure score did not differ significantly from the mean of the 8-person groups in which the E participated in the self-disclosure process, and for 2-person groups in which the E disclosed, the mean self-disclosure scores did not differ significantly whether the E disclosed or not.

It is difficult to talk about a complete lack of an E-effect in these larger groups, however, since [illegible] variance for the effect of replications in the [illegible] E-disclose treatment combination yielded no [illegible] replications effect. But, for the 8-person, [illegible] treatment combination, the analysis of [illegible] the effect of the two replications yielded a [illegible] variance [illegible] or, E- [illegible] y [illegible]. Or [illegible] E-Discl[illegible] effects of [illegible] ncy of [illegible] E-[illegible] cations [illegible] ose condition, a [illegible]icant [illegible].

It [illegible] to talk about the [illegible] of E-[illegible]what different ways. [illegible] an overall experimental [illegible] when the E disc[illegible] as though Ss have [illegible]ition of the experimental task from which to [illegible], their performances are consistent, although [illegible]arily different from the overall performances of [illegible]cations of the experiment in which the E does [illegible] a model, or provides a negative model. In [illegible]onditions, Ss tend to use the experimental [illegible] the same manner as clinical psycholo- [illegible] their clients to use Rorschach blots -- [illegible] our expectations for the demands and/

[illegible]

[illegible] the present [illegible] replications [illegible] ly see [illegible] behavior [illegible] person, *E*-[illegible] replications [illegible] while in the 8-person, *E*-[illegible] means of individual replications [illegible] 44. In the 2-person, *E*-Disclose s[illegible] means for the four replications are 66 [illegible] 57 38, and 77 05, while in the *E*-No-Disclose group, the mean self-disclosure scores are 87.38, 38.0[illegible], 67.38, and 87.38.

Examination of the 4-person, *E*-Disclose replication means again yields a rather consistent picture. These means were 87.33, 37 38 and 81 85. In the 4-person, *E*-No-Disclose situation, the replication means were 82.22, 69.20, and [illegible] 26.

The effect of *E*-behavior on successive replications of the group conditions in the present experiment, [illegible] seems to support the notion that *E*-disclosing [illegible] of [illegible] the 4-person [illegible] grouping is a kind of [illegible] for self-disclosure. For, even [illegible] *E*-[illegible] effect appears across all replications [illegible] of the non-significant replications [illegible] the smaller 2-person [illegible] by the limitations [illegible], since *Ss* answered [illegible] upper limit of the [illegible] reveals) among low- [illegible]

[illegible] findings, it can be stated [illegible] appear to be situationally- [illegible] extent study) the situa- [illegible] and experimenter behavior [illegible] "optimal" conditions for [illegible] scaled intimacy-values [illegible] appear to exert a minimal [illegible] interaction *for the* [illegible] and a self-disclosing [illegible] intimacy or depth [illegible] relatively short period of time ([illegible]) is similar to Drag's (1968) results in [illegible] that *Ss* did not necessarily [illegible] to in[illegible] superficial levels of [illegible] "depth" disclosure in [illegible] findings can also be [illegible] assumpti[illegible] to incre[illegible] [illegible] rather than the smooth [illegible] sudden "tail-off" for the [illegible] combinations (Figure 3), or [illegible] the 8-person, *R*-Disclose [illegible], *S*-No-Disclose combinations [illegible] "tailing off" at the higher [illegible]

[illegible] of caution to the above [illegible] research, since there [illegible] the intimacy-scaled [illegible] questionnaire were not [illegible] as intimate as the scale [illegible]. Evidence for this stems [illegible] somewhat [illegible] the distribution of [illegible] with a [illegible] the upper end of the total range of selec[illegible] inspection of the manner [illegible] which *Ss* answered [illegible] items (see Figure 3 and 4) [illegible] the actual ex[illegible] situation, one may infer a [illegible] negative [illegible] intimacy [illegible] authority [illegible] [illegible]

[illegible]

[illegible] reversals [illegible] by [illegible] groups (Fig [illegible] [illegible] than 60 per cent of the Ss answered item [illegible] schedule, and then 100 per cent responded to the [illegible] more intimate item 11. The over all shape of this curve, along with the saw-toothed pattern of the three curves in Figure 4 may be, in part, a function of errors in either the original scaling procedure or incorrect reporting of item values.

In spite of the above procedural criticisms, it can be stated that Ss in the present experiment who were exposed to certain "situational" conditions exhibited more se[illegible] treatment [illegible] provid[illegible] invitat[illegible] phenomenon [illegible] Resnick ([illegible]).

[illegible] writer feels applies, [illegible] are previous research [illegible] Powell, 1964), adds a poss[illegible] pleasant research consistency. [illegible] extent are the findings concerning [illegible]ip between an invitational p[illegible] and certain *situational variables* a r[illegible] is called here "the bus-rider phenomenon"? [illegible] to what extent do *Ss* reveal large amounts of [illegible]mate self-information to other *Ss* simply [illegible] they know that they will probably never again interact with their fellow *Ss*, and therefore feel relatively free to "disclose all." This question arose because of [illegible] data gathered from *Ss* after their participation in the experiment. Several of the *Ss* made statements [illegible] indicating that they would *not* have shared self-information with close friends or roommates, [illegible] they had shared with fellow *Ss*. The reasons which [illegible] *Ss* gave for their statements supported the notion of [illegible] "bus-rider" phenomenon, since most *Ss* knew that they would not be forced to [illegible], ir light [illegible] consideration [illegible] e error" in [illegible]

[illegible] ment [illegible] III

[illegible] t control was [illegible] individual self- [illegible] rson pro[illegible]-moment correlation [illegible] ed for all Ss receiving the same [illegible] combi[illegible] of the E-behavior and Group size [illegible]. This [illegible] six correlation coefficients [illegible] and self-[illegible]sure scores for all Ss in [illegible] six [illegible] groups. A negative correlation [illegible] of hypothesis III, because [illegible] the direction of externality. [illegible] coefficients, only one was significant [illegible] of confidence, and this was in the [illegible] that expected. Thus, for Ss in the [illegible] which the E did not self-disclose, [illegible] to be related to increased self- [illegible] the other five groups, three yielded low, [illegible] rough negative, r's between externality [illegible] score. These groups were the two- [illegible] ving the two different E treatments, [illegible] roups receiving the E-No-Disclose [illegible]

[illegible] the occurrence of [illegible] S's just perhaps [illegible] self-disclosure in the group [illegible] ed in terms of a "conformit[illegible] self-disclose not because they [illegible] disclosure from fellow gro[illegible] rewarding, but because it is [illegible]. Some Ss may feel that they [illegible] member(s) of a group if they [illegible] other members of the group engage in [illegible] Ss may be responding to the "demands [illegible] another way. Ss know that they are [illegible] ing, since, after all, they are pa[illegible] ment. Regardless of personal [illegible] S [illegible] may have felt that [illegible] to [illegible] E. Some evidence for [illegible] Ss' qualitative responses after [illegible] has been completed. At [illegible] one S [illegible] S [illegible] could not have self-[illegible] sed had not the other Ss done so, but, the S reported, [illegible] have felt sillier just sitting while everyone [illegible] talking. Still another S reported to the [illegible] that he had discussed many intimate items "because [illegible] what you wanted me to do, wasn't it?"

[illegible] in, the present attempt to relate self-[illegible] to the I-E locus of reinforcement control [illegible] rooted on, at best, a poor theoretical rationale [illegible] hypothesis III [illegible] false, and thereby [illegible] The first of these was that [illegible] relationship is based upon [illegible] secondly, that if the [illegible] Ss' awareness of the [illegible] supposed to guide mutual disc[illegible] in a positive relationship [illegible] amount of self-disclosure. Even grant[illegible] assumption is correct, it may be jus[illegible] who are aware of a positive reward con[illegible] mutual disclosures may also be (and should [illegible] the negative costs surrounding self-disclosure in a large group situation in which the "risk" of [illegible] be enhanced. Taking this latter fac[illegible], one would probably make different [illegible] concerning the relationship between interna[illegible] and self-disclosure, according to the [illegible] "internalizers" or "externalizers" find themselves.

[illegible] ate that the one significant correla[illegible] could have been spurious or a chance [illegible] inspection of scatter diagrams of [illegible] that three sets of extreme [illegible] or a large percentage of the [illegible] between the two variables for [illegible]

[illegible], however, [illegible] significant [illegible] the remainder [illegible] group sizes, [illegible] S-disclose groups) and the 2-person, [illegible] have been [illegible] by the [illegible] in the self-disclosure [illegible] three group sizes, the small [illegible] tendency for a large per- [illegible] the maximum score of the self- [illegible] have ruled out the occurrence [illegible] the I-E scores and self- [illegible] somewhat weakened, however, [illegible] between the two variables in [illegible] which scores on the self- [illegible] considerably from subject [illegible]

[illegible] that situational [illegible] variables, play a pre- [illegible] self-disclosure. This [illegible] research reported [illegible] in which the authors [illegible] scores on the per- [illegible] submissiveness, the [illegible] rates of the E's self-disclosed [illegible] determined Ss' self-disclosure. [illegible] report a similar lack of [illegible] disclosure and personality [illegible] noted, too, that in the present [illegible] conditions [illegible]ose) in which the [illegible] in their "pull" or [illegible]

[illegible] Scores And [illegible] Trading in Self-Disclosure: Hypot[illegible]

[illegible] predicted that when an individual perceiv[illegible] members as providing him with self-information [illegible] least as intimate as his own disclosures [illegible] group, he will be willing to continue "trading[illegible] when an individual perceives his own disc[illegible] more intimate than the self-informat[illegible] by the group, he will be less willing [illegible] trading relationship in self-disclos[illegible]

[illegible] above hypothesis was conducted by compu[illegible] product-moment correlation coefficients for all Ss [illegible] same treatment combinations. This yielded six [illegible] coefficients, one between individual total [illegible] scores, and the ratio of the ratings of Ss' [illegible] follow Ss' disclosures, for all treatment [illegible]tions. Because of the nature of the self-[illegible] the correlation coefficients between these ratin[illegible] total self-disclosure scores would have to be [illegible] to support hypothesis IV. With [illegible] reached [illegible]ficance, although [illegible] in the [illegible]-person groups [illegible] approached significance [illegible] correlation coefficients [illegible] necessary for support [illegible]

[illegible] correlation coeffi[illegible] again be at least parti[illegible]ion of scatter diagrams of the [illegible]-person, E-Disclose treatment [illegible] data reveal a slight tendency [illegible] co-vary in a positive manner such that [illegible].42 appears to validly describe the relati[illegible] the variables For Ss in the 8-person [illegible]-Disclose treatment combinations, the [illegible]rams are somewhat random in distri[illegible]ain appear to be legitimately described [illegible]ned r's (.12 and -15, respectively)

Subject[illegible]-person, E-Disclose treatment comb[illegible] yielded a spuriously [illegible] correlation [illegible] self-other ratings and [illegible] self disclosure [illegible] of the scatter diagrams for Ss [illegible]atment combination reveals that [illegible]sclosure scores did not

[illegible]

[illegible] light Ss [illegible] ure [illegible] relatively lower scores [illegible] two scores [illegible] to co-vary [illegible] self-[illegible] ratings (relative to the distribution of self-other ratings and self-disclosure scores for the remaining six Ss) in such manner as to produce a correlation coefficient of .40

Examination of the manner in which these two variables co-varied in the 2-person groups in which the E did participate in the self-disclosure process, indicates that the obtained r=.63 legitimately describes the relationship between the two variables, but that, again, [illegible] for five of the eight Ss were the maximum obtainable on the self-disclosure schedule. The apparently low ceiling of this instrument, then, may well have prevented the occurrence of significant correlations between the two variables, at least for those Ss inter-

[illegible].

[illegible] to [illegible] between _Ss_' [illegible]. However, [illegible] the [illegible] he [illegible] toward [illegible] self-[illegible] taken [illegible] predicted [illegible] investigation, [illegible], nothing more than [illegible]igate [illegible] phenomenon further [illegible].

[illegible]estigation of the relationship [illegible] of self-disclosure and per-[illegible]closure should carefully [illegible] adequacy of the instrument [illegible]ive measure of self-[illegible]. [illegible] evidence from the [illegible], that the objectively rated [illegible], which were not experienced [illegible] as ratings suggest they should [illegible].

[illegible]ve to this conclusion is that, [illegible] variables" which one [illegible] from the present [illegible] between the [illegible] those situations [illegible] vary considerably [illegible], *E*-No-Disclose [illegible]) below the upper [illegible]. Additional [illegible] derived from the [illegible] tion, that only [illegible] between self- [illegible] s and internal vs. external locus of [illegible] control, *even for Ss in those three con- [illegible] experiment in which both the self-disclosure scores and the I-E scores again varied considerably*.

The present evidence, then, does not conclusively demonstrate the tenability of one interpretation of the data over the other. More carefully controlled research is needed which is directly addressed to this [illegible]ion of alternative interpretations of existing evidence.

Que[illegible]
Behavior Question[illegible]

> Can Ss [illegible] in the group si[illegible] their question[illegible]

This que[illegible] by computing Pearson product-mo[illegible]nts between the selection [illegible] scale value checked by each S, and [illegible]-Disclosure score for all Ss receiving the same [illegible] combinations. None of the six correlation coeffic[illegible] obtained in this manner was significant at the .05 [illegible] confidence. Only two, that for the 4-person E-D[illegible] treatment combination, and that for the 2-person, E-No-Disclose treatment combination, showed even a positive trend toward a relationship between Ss' questionnaire claims, and their actual self-disclosing behavior. For the other four groups of Ss there appears to be no relationship between what Ss say they are willing to reveal to a group of same sex strangers, and what they actually do disclose. It should be noted, also, that regardless of the manner in which one looks at the selection scores and the experimental scores, i.e., highest median-selection scores correlated with highest median scores in the experiment vs. total selection scores correlated with total experimental scores, no significant relationships obtain. The Pearson product-moment correlation coefficients between total selection scores and total experimental scores are shown in Table 15.

[illegible] CIENTS
[illegible] IMENTAL
[illegible] T TREATMENT

[illegible]	E-D [illegible]	[illegible] Disclose
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	-.23
[illegible]	[illegible]	.30

[illegible] son product-moment [illegible] the median scale value of the [illegible] on the selection questionnaire [illegible] of the highest item answered in [illegible]

[illegible]

[illegible] CORRELATION COEFFICIENTS
[illegible] VALUE (MEDIAN VALUE)
[illegible] SCORES AND HIGHEST SCALE VALUE (MEDIAN)
[illegible] EXPERIMENTAL SCORES

[illegible]	E-Disclose	E-No-Disclose
[illegible]	.30	-.18
[illegible]	.36	.15
[illegible]	.07	-.39

[illegible] poor validity of questionnaires for predict- [illegible] scores in those groups receiving the E-Disclose treatment in this study might have been expected in light of Drag's (1968) findings. She reports that for *S*s in dyadic interaction with whom the *E* participated in either (1) a 20-minute, self-disclosing dialogue *and* a game called "Invitations,' or (2) in a group of *S*s with whom *E* merely interacted in the game of "Invitations" that *S*s' questionnaire claims were *poor* predictors of their actual self-disclosing behavior in *S*-*S* dyads. On the other hand, for *S*s in two other groups, in one of which *S*s were interviewed by *E* for 20 minutes prior to the game of Invitations in *E*-*S* dyads, and the other of which had no prior interaction with the *E*, subsequent *S*-*S* pairings, yielded self-disclosure scores which *were* consistent with questionnaire claims.

Drag explained her results in terms of two factors, (1) disruption of *S*s' expectancies for the *E*'s behavior in the Interview-Invitations group, and (2) in terms of experimenter modeling effects. In the first two groups of her study, Drag's *S*s had developed expectations about the *E*'s role which were subsequently validated by *E*'s behavior. In these groups, *S*s expected *E* to be a warm, open person and *E* fulfilled their expectations. *S*s responded to *E*'s disclosures with self-disclosure which was significantly greater than their questionnaire claims would have indicated. When subsequently these *S*s were paired with other *S*s, there was a significant carry-over or modeling effect. Subsequent self-disclosure scores in the latter situation were significantly higher than questionnaire claims indicated they would be.

A similar rationale could explain the failure of a significant relationship between Ss' questionnaire claims and actual self-disclosure in those conditions of the present experiment in which the E self-disclosed. That is, the introduction of the situational variable of E self-disclosure, and the effects of experimenter modeling could reasonably explain the enhancement of self-disclosure scores above Ss' claimed self-disclosure scores as measured by their selection questionnaire responses.

What is difficult to explain in the present study, however, is the failure of Ss' questionnaire claims to accurately predict self-disclosing behavior in those conditions of the present experiment in which the E did not self-disclose. In the two groups of Drag's (1968) study in which Ss, first, either were interviewed by E, and then played the disclosure game, or second, in the control group in which E had no prior contact with Ss (in the form of self-disclosing or interview behavior), subsequent S-S pairings yielded self-disclosure scores which were consistent with Ss' questionnaire claims. Ss simply maintained prior commitment to disclose at a low level. Drag discussed these findings in terms of a lack of consistency in E behavior in the former situation.

wherein Ss placed less trust in the "genuineness" of E's disclosures after she had interviewed them, and therefore did not model her. In the latter situation, Ss simply had no opportunity to interact with the E, and modeling of her self-disclosing behavior could not occur.

Especially from the findings of Drag's study, regarding those E-S dyads who received no E prior-contact, one would have expected similar results in the present research, i.e., that Ss' questionnaire claims would accurately predict self-disclosing behavior in the E-No-Disclose conditions of the experiment. As stated above, however, this did not occur.

Perhaps a partial explanation for this lack of consistency between the two studies is a function of the experimental "situational" variables examined in each. To be sure there is considerable difference between an 8-person subject grouping plus the E, and a 2-person situation involving either 2 Ss or the E and a S as in Drag's (1968) research. Similarly, the 4-person, S-groupings in the present study were different from the dyadic situation in Drag's research, since the subject groupings in the present study always included the E. These groupings, then, were in actuality 9-, 5-, and 3-person situations.

In a similar vein, Drag specified the target "same-sex stranger" in her questionnaire instructions. This obviously applied equally well to the E or another S with whom any given S might [illegible] paired, and, therefore, constituted a fairly specific target situation into which her Ss could project themselves when making their questionnaire responses. In the present research, however, the target was specified only as a small group of same-sex strangers. The latter is obviously much less specific as a target situation, and allows for much greater individual variation amongst Ss making questionnaire responses. In light of the above, it would seem legitimate to suggest that future attempts to assess the predictive validity of self-disclosure questionnaires should include target-specific instructions to Ss.

Finally, perhaps the difference in the sex of the Ss who served in the present experiment (males) and Drag's research (females) provides a partial explanation for the disparity between the results of the two studies. Jourard and Lasakow (1958) and Jourard and Landsman (1960) report consistent sex-differences in amount of self-disclosure to specified target persons, with women disclosing more than men. While these latter questionnaire studies dealt with after-the-fact measures of disclosure in relation to intimately-known target persons, it is reasonable to expect sex-differences in ongoing self-disclosure to relatively unknown target persons. The existence of basic differences in self-disclosure patterns for males and females may make attempts at comparisons between research findings with [illegible] of these two groups untenable at the present time. A need exists in self-disclosure research to investigate the existence of sex-differences when "situational variables" are held constant.

CHAPTER IV

SUMMARY

The present research was intended to further [illegible] the investigation of self-disclosure as "ongoing behavior." In this work, two classes of variables were examined in their effects upon self-disclosure. The situational variables of *experimenter behavior* (as a participant or as a non-participant in the self-disclosure process), and the *size of the group* (8- vs. 4- vs 2-person) in which subjects are placed were studied. Second, the personality variables of Internal vs. External locus of reinforcement control, and Self-Other ratings of the intimacy of disclosures were examined to determine whether or not these are correlates of self-disclosure. Finally, the question of whether or not self-disclosing behavior could be predicted from subjects' questionnaire claims was further investigated.

It was found that the two situational variables of *E*-behavior and group size interacted to produce significantly different subject self-disclosing behavior in the 4-person groups in which the *E* participated in the self-disclosure process. Disclosure in the 4-person groups in which the *E* did not disclose occurred at significantly lower intimacy levels, as compared to disclosure in groups of 4 *Ss* in which *E* took part.

For *Ss* in groups of decreasing size in which the *E* did not disclose, the mean amount of self-disclosure increased in a linear fashion, as predicted, although the mean scores were significantly different only for *Ss* in the largest and smallest groups. In the groups of decreasing size in which the *E* participated in the self-disclosure process, on the other hand, the mean self-disclosure scores of *Ss* in various-sized groups were arranged in a non-linear fashion. Subjects in the 8-person groups again produced the least amount of self-disclosure, but, contrary to expectations, the 4-person group mean was the largest, although not significantly different from that of the 2-person groups. Inspection of the raw data indicated that a significant difference between the 4- and 2-person groups receiving the *E*-Disclose treatment may have been precluded by the limitations of the self-disclosure schedule itself.

Of special interest was the finding of significant replications effect in groups of 8-persons and 4-persons, and a near-significant effect in the 2-person groups, in which the *E* did not participate in self-disclosure. It would seem that *Ss* tend to utilize the experimental situation as a type of "projective task" when the *E* fails to provide a model for them, as opposed to that situation in which *Ss* can model the *E*. In the [illegible] [illegible], self-disclosure scores are not significantly different from one group of Ss to another.

From the present findings, it would also seem that previous research into the effect of personality in self-disclosure presents an accurate picture. The dimension of Internal-External locus of reinforcement control was found to be significantly related to self-disclosure for Ss in only one of the six treatment combinations, the 4-person, E-No-Disclose combination, and this may have been a spurious result. Subjects' ratings of Own vs. Others' disclosures failed to produce any significant correlations with self-disclosure scores. A cautious interpretation of the data relating the personality measures to self-disclosure, however, was dictated by the limitations of the self-disclosure items utilized as a schedule in the experiment.

Finally, the present findings indicated that subjects' questionnaire claims will not accurately predict actual self-disclosing behavior in the group situations utilized in this research. This finding was in contradistinction to previous research in which it has been shown that Ss' questionnaire claims are corroborated by actual behavior if the E fails to provide a consistent, self-disclosing model. The latter finding was discussed in terms of the lack of specificity of the target situation in the instructions to Ss during administration of the [illegible] and sex-differences of subject populations.

APPENDICES

APPENDIX [illegible]

[illegible] QUESTIONNAIRE

[illegible] OF SUBJECT

NAME: ______________ AGE: ____ COLLEGE YEAR: ______

MARITAL STATUS _____ MAJOR (or proposed major) ______

RELIGION: __________ RACE: ______ NATIONALITY: ________

HOME OR DORMITORY PHONE NUMBER: ____________________

GAINESVILLE ADDRESS: ____________________

Identify two of your closest male friends who are taking this course with you:

1. ____________________
2. ____________________

DIRECTIONS: Imagine yourself in a situation in which you are becoming acquainted with a small group of men your own age, all of whom, including yourself, were initially strangers to one another. Suppose that the subject-matter in each of the following statements becomes a topic of conversation in the group. Indicate by placing a check (✓) in the left-hand margin, those items of information which you would be willing to share or talk about with the group. Remember, you have just met, and are becoming acquainted with, the members of a small group of men about your own age.

			Scale Value	Q
___	1.	The number of brothers and sisters I have.	1.23	1.00
___	2.	My favorite hobbies.	1.68	1.86
___	3.	How often I shave.	2.16	1.62
___	4.	Whether or not I enjoy attending lectures on serious subjects.	3.12	2.41
___	5.	My attitudes about smoking.	3.64	2.32

			[illegible]	[illegible]
___	6.	[illegible] get the most satisfaction from, in my work	[illegible]	[illegible]
___	7.	The worst pressures and strains in my work	4.96	2.28
___	8.	Faults that I would like to change in my working habits	5.43	2.39
___	9.	The kind of person I like to date	6.40	2.64
___	10.	Things or situations that embarrass me	7.39	2.43
___	11.	Feelings I have when I am "chewed out" or severely criticized	8.21	1.78
___	12.	Times when I have not been dependable	8.70	1.83
___	13.	Lies that I have told my friends	9.29	2.08
___	14.	My experiences with prostitutes	9.92	2.32
___	15.	Persons with whom I have had sexual experiences	10.69	1.37

APPENDIX B

[illegible]

AND Q VALUES) [illegible] EXPERIMENT PROPER

	Scale Value	Q
1) My place of birth.	1.18	0.74
2) My smoking habits.	1.65	1.71
3) My favorite ways of spending spare time, e.g., [illegible] reading, cards, sports [illegible] parties, etc.	2.18	1.75
4) My views on the [illegible] information [illegible] etc.	3.05	2.53
5) How I [illegible] sort should [illegible] conflicts.	3.68	2.58
6) What I enjoy most, and get the most satisfaction from, in my work	4.11	2.49
7) The worst pressures and strains in my work	4.96	2.28
8) [illegible] that I feel I have in my working [illegible]	5.43	2.39
9) The kind of person I like to date.	6.40	2.64
10) The extent to which I get the amount of sympathy I need.	7.69	2.18
11) Feelings I have when I am 'chewed out' or severely criticized.	8.21	1.78
12) Whether or not I ever cried as an adult when I was sad.	8.94	1.97
13) My problems, if any, about getting favorable attention from the opposite sex.	9.23	2.16

		[illegible]	[illegible]
[illegible]	[illegible] had sexual relations in my life.	[illegible]	2.29
32)	How often I masturbate	[illegible]	1.42

[illegible]

[illegible]

[illegible] sed [illegible] onal [illegible] f-statements [illegible] nt is [illegible] ersonal or [illegible] e yo[illegible] es and the [illegible] sures o[illegible] re when you [illegible] y, ta[illegible] et of cards [illegible] you ha[illegible] to ask all of [illegible] look a[illegible] ll notice that it [illegible] ngs [illegible] tem 3, etc. Under [illegible] tem headi[illegible] or person 1, person [illegible] erson 3, and [illegible] ersons listed [illegible] scale corr[illegible] of people in the present group. I [illegible] ng to ask [illegible] of you to circle the person number, [illegible] number one, number two, and so on, which corre[illegible] the number which you have pinned to your shirt. [illegible] do this for all 15 items listed on the scale. [illegible] checked on each S, here, to be sure that they made the appropriate selection). The person-numbers which you have circled, then, are those which indicate yourself. [illegible] is at this point on the scale where you will make ratings of how intimate you thought your own disclosure was for any given item. The numbers which you have not circled correspond to the numbers which your fellow group members have pinned to their shirts. It is according to these numbers that you will make ratings of how intimate you thought that their disclosures were for each item. Your ratings are to be made immediately after you, or one of the other group members has talked about a given item.

Please notice the scale next to each person-number now. As you can see, the rating scales themselves range from zero to six. You would check the *zero* after the number corresponding to that number on your shirt, if you refused to talk about a given item. The *zero* is reserved for those situations, then, in which you or your fellow group members refused to talk about a given item. If, however, you talk about an item, and you think that you revealed yourself at a very low level of intimacy, you would probably check *one* on the scale. The same would be true if you thought that one of the other members of the group revealed himself at a very low level of intimacy, that is, you would check the *one* on the scale next to his number. If, however, you thought that you, or another member of the group were revealing yourselves at an intermediate level on a given item, you would check the scale at *three* or *four* next to the appropriate person-number. Finally, if you think that your own disclosure is a very intimate one for any given item, you would check [illegible] correspondi[illegible] [illegible] true [illegible] res [illegible] [illegible] a ve[illegible] [illegible] ures of [illegible] group members are for [illegible] Are there any questions? Please remember [illegible] ratings are [illegible] made immediately after you o[illegible] group member [illegible] talked about a given item.

[illegible]

Example [illegible]

[illegible] Group

Item 1

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 6 7

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 7

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] 7

[illegible] 0 [illegible] [illegible] 3 4 5 6 7

[illegible]enter 0 [illegible] [illegible] 3 4 5 6 7

Item 2

Person 1- 0 1 2 3 4 5 6 7

Person 2- 0 1 2 3 4 5 6 7

Person -- 0 1 2 3 4 5 6 7

Person 8- 0 1 2 3 4 5 6 7

Experimenter 0 1 2 3 4 5 6 7

[illegible]

[illegible]

[illegible]

[illegible]

This is a questionnaire [illegible] statements [illegible] Each item consists of a pair of [illegible] lettered a or b. Please [illegible] one and only one, [illegible] as far as you're concerned. [illegible] you actually [illegible] you should [illegible] because or [illegible] This is a measure of personal [illegible] right or wrong answers.

[illegible] answer sheet [illegible] THIS ANSWER SHEET NOW. [illegible] information requested by [illegible], then finish reading [illegible] booklet until you are [illegible]

[illegible] items carefully but do not [illegible] on any one item. Be sure to find an [illegible] choice. Find the number of the item on [illegible] and mark-in the letter A or B which you [illegible] most true

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

REMEMBER

Select that alternative which you personally believe to be more true

[illegible]

1. a. [illegible] their parents [illegible]

b. [illegible] nowadays is that [illegible] with them.

2. a. [illegible] things in people's lives are [illegible]

b. [illegible] result from the mistakes they make.

3. a. [illegible] of the [illegible] we have wars is because people [illegible] enough interest in politics.

b. There will [illegible], no matter how hard people try to [illegible] them.

4. a. In the long run [illegible] get the respect they deserve in this world.

b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. a. The idea that teachers are unfair to students [illegible] nonsense.

b. [illegible] students don't realize the extent to which [illegible] grades are influenced by accidental [illegible]ings.

6. a. [illegible] the right breaks one cannot be an effective [illegible]

b. [illegible] people who fail to become leaders have [illegible] advantage of their opportunities.

[illegible]

7. a. [illegible] some people [illegible]
   [illegible]
   b. [illegible] to like them don't
   [illegible] with others

8. a. [illegible] in determining one's
   [illegible]
   b. [illegible] r life which determine
   [illegible]

9. a. [illegible] that what is going to
   [illegible]
   b. [illegible] never turned out as well
   [illegible] sion to take a definite
   [illegible]

10. a. [illegible] well-prepared student, there
    is rarely [illegible] ever such a thing as an unfair
    test.
    b. Many times exam questions tend to be so un-
    related to course work that studying is really
    useless

11. a. Becoming a success is a matter of hard work,
    luck has little or nothing to do with it.
    b. Getting a good job depends mainly on being in
    the right place at the right time

12. a. The average citizen can have an influence in
    Government decisions.
    o This world is run by the few people in power and
    there is not much the little guy can do about it.

I more strongly believe that

13 a When I make plans, I am almost certain that I can make them work.

b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow

14 a. There are certain people who are just no good.

b. There is some good in everybody.

15 a In my case getting what I want has little or nothing to do with luck

b. Many times we might just as well decide what to do by flipping a coin

16 a. Who gets to be the boss often depends on who was lucky enough to be in the first place first.

b. Getting people to do the right things depends upon ability, luck has little or nothing to do with it

17 a As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control

b By taking an active part in political and social affairs, the people can control world events.

18 a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

b. There really is no such thing as "luck."

19 a. One should always be willing to admit his

[illegible] that:

[illegible]

b. [illegible] best to cover up one's mistakes.

20. a. [illegible] know whether or not a person [illegible]

b. [illegible] you have depends upon how [illegible] are.

21. a. [illegible] bad things that happen to [illegible] the good ones.

b. [illegible] the result of lack of a [illegible]ance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.

b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.

b. There is a direct connection between how hard I study and the grades I get.

24. a. A good leader expects people to decide for themselves what they should do.

b. A good leader makes it clear to everybody what their jobs are.

25. a. Many times I feel that I have little influence over the things that happen to me.

b. It is impossible for me to believe that chance or luck plays an important role in my life.

I more strongly believe that

26 a. People are lonely because they don't try to be friendly.

b. There's not much use in trying too hard to please people, if they like you, they like you.

27 a. There is too much emphasis on athletics in high school.

b. Team sports are an excellent way to build character.

28 a. What happens to me is my own doing.

b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29 a. Most of the time I can't understand why politicians behave the way they do

b. In the long run the people are responsible for bad Government on a national as well as on a local level.

ANSWER SHEET

SOCIAL REACTION INVENTORY

Name ______________________ Age ____ Sex __________

Classification ____________ Section ______________

1. A B
2. $\underline{A}$ B
3. A $\underline{B}$
4. A $\underline{B}$
5. A $\underline{B}$
6. $\underline{A}$ B
7. $\underline{A}$ B
8. A B
9. $\underline{A}$ B
10. A $\underline{B}$
11. A $\underline{B}$
12. A $\underline{B}$
13. A $\underline{B}$
14. A B
15. A $\underline{B}$
16. $\underline{A}$ B
17. $\underline{A}$ B
18. $\underline{A}$ B
19. A B
20. $\underline{A}$ B
21. $\underline{A}$ B
22. A $\underline{B}$
23. $\underline{A}$ B
24. A B
25. $\underline{A}$ B
26. A $\underline{B}$
27. A B
28. A $\underline{B}$
29. $\underline{A}$ B

Score = Number of items underlined

APPENDIX L

EXAMPLE OF RECORD SHEET

8-Person Groups

Item Number 1	Yes	No
Subject Number 1		
2		
3		
4		
5		
6		
7		
8		

Item Number 2		
Subject Number 1		
2		
3		
4		
5		
6		
7		
8		

Item Number 3		
Subject Number 1		
2		
3		
4		
5		
6		
7		
8		

Item Number 15		
Subject Number 1		
2		
3		
4		
5		
6		
7		
8		

APPENDIX F

RAW DATA

SELF-DISCLOSURE SELECTION SCORES (MEDIAN SCALE VALUE)

8-Person, E-Disclose Groups

S #	Replication 1	Replication 2
1	9.29	9.29
2	6.40	8.70
3	9.92	9.92
4	6.40	8.21
5	8.21	8.21
6	7.39	7.39
7	8.70	6.40
8	8.21	9.92

8-Person, E-No-Disclose Groups

S #	Replication 1	Replication 2
1	9.29	9.92
2	8.21	7.39
3	8.21	8.21
4	6.40	6.40
5	6.40	8.70
6	9.92	8.70
7	8.21	9.29
8	8.70	9.92

4-Person, E-Disclose Groups

S #	Replication 1	Replication 2	Replication 3
1	9.92	8.21	6.40
2	6.40	6.40	8.70
3	6.40	9.92	7.39
4	8.21	9.92	9.92

4-Person, E-No-Disclose Groups

S #	Replication 1	Replication 2	Replication 3
1	7.39	9.92	9.92
2	8.21	6.40	6.40
3	8.70	8.21	6.40
4	9.92	9.92	8.21

2-Person, E-Disclose Groups

S #	Replication 1	Replication 2	Replication 3	Replication 4
1	9.92	8.21	9.92	8.21
2	6.40	9.92	6.40	8.70

2-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	6.40	9.92	8.21	8.70
2	9.92	6.40	9.92	8.21

TOTAL SELF-DISCLOSURE SCORES (EXPERIMENT)

8-Person, E-Disclose Groups

	Replication 1	Replication 2
S # 1	59.02	59.98
2	57.77	36.66
3	41.28	76.68
4	53.59	66.71
5	57.48	66.71
6	59.02	66.71
7	43.39	49.79
8	67.33	60.31

8-Person, E-No-Disclose Groups

	Replication 1	Replication 2
S # 1	57.48	66.71
2	26.65	77.41
3	66.71	66.71
4	49.79	66.71
5	66.71	66.71
6	57.48	76.68
7	47.40	57.48
8	46.08	66.71

4-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	87.38	87.38	65.27
2	87.38	87.38	87.38
3	87.38	87.38	87.38
4	87.38	87.38	87.38

4-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	87.38	76.68	33.52
2	87.38	66.71	66.71
3	66.71	66.71	63.03
4	87.38	66.71	57.77

2-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	66.71	87.38	87.38	87.38
2	66.71	87.38	87.38	66.71

-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	87.38	57.48	87.38	87.38
2	87.38	18.57	87.38	87.38

ROTTER I-E SCORES

8-Person, E-Disclose Groups

	Replication 1	Replication 2
S # 1	12.00	9.00
2	10.00	6.00
3	7.00	2.00
4	4.00	16.00
5	8.00	5.00
6	14.00	7.00
7	10.00	9.00
8	7.00	10.00

8-Person, E-No-Disclose Groups

	Replication 1	Replication 2
S # 1	9.00	7.00
2	17.00	12.00
3	15.00	12.00
4	3.00	7.00
5	7.00	13.00
6	18.00	11.00
7	8.00	16.00
8	9.00	3.00

4-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	12.00	4.00	9.00
2	5.00	12.00	8.00
3	14.00	11.00	6.00
4	6.00	8.00	14.00

4-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	15.00	-- --	2.00
2	15.00	5.00	13.00
3	4.00	9.00	4.00
4	8.00	16.00	4.00

2-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	14.00	16.00	7.00	11.00
2	10.00	10.00	5.00	10.00

2-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	4.00	13.00	13.00	4.00
2	5.00	7 00	6.00	6.00

RATIOS DERIVED FROM EACH S's
SELF-OTHER RATINGS OF SELF-DISCLOSURE

8-Person, E-Disclose Groups

	Replication 1	Replication 2
S # 1	0.878	1.223
2	1.137	-----
3	1.170	1.258
4	1.034	0.935
5	1.034	1.133
6	0.844	1.023
7	0.636	0.728
8	1.039	1.333

8-Person, E-No-Disclose Groups

	Replication 1	Replication 2
S # 1	0.985	1.080
2	0.932	0.975
3	0.922	0.920
4	0.985	1.442
5	1.067	0.840
6	1.018	0.994
7	1.125	1.035
8	1.000	1.198

4-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	1.646	0.984	0.804
2	0.951	0.983	0.977
3	0.971	0.996	1.302
4	1.079	1.002	1.169

4-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3
S # 1	1.149	1.061	1.097
2	1.185	1.077	-----
3	0.889	0.984	1.433
4	1.127	1.055	0.955

2-Person, E-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	1.045	1.173	1.102	0.951
2	0.856	1.090	1.080	0.985

2-Person, E-No-Disclose Groups

	Replication 1	Replication 2	Replication 3	Replication 4
S # 1	1.000	1.027	0.989	1.022
2	0.964	0.875	0.861	1.013

REFERENCES

Altman, I. *Social interaction: a theoretical framework and behavior classification system.* Bethesda, Md 1963 (mimeo).

Altman, I. and Haythorne, W. Interpersonal exchange in isolation. *Sociometry*, 1965, *28*, 411-426.

Carkhuff, C.B. and Berenson, B.G. *Beyond counseling and therapy.* New York: Holt, Rinehart and Winston, Inc., 1967.

Chittick, E.V. and Himelstein, P. The manipulation of self-disclosure. *J. of Psychol.*, 1967, *65* (1), 117-121.

Culbert, S.A. Trainer self-disclosure and member growth in a T-group. *Dis. Abstr.*, 1966, 27 (6-B), 2131-32.

Drag, Lee Reifel. Experimenter-subject interaction: a situational determinant of differential levels of self-disclosure. Unpublished Master's thesis, University of Florida, 1968.

Duncan, D.B. Multiple range tests for correlated and heteroscedastic means. *Biometrics*, 1957, *13*, 164-176.

Frey, M. The effects of self-disclosure and social reinforcement on performance in paired associate learning. Unpublished Honors paper, University of Florida, 1967.

Friedman, R. Eye-contact and self-disclosure. Unpublished Honors paper, University of Florida, 1968.

Heifitz, M.L. Experimenter effect upon openness of response to the Rotter Incomplete Sentence Blank. Unpublished Honors paper, University of Florida, 1967.

Himelstein, P. and Kimbrough, W.W. A study of self-disclosure in the classroom. *J. Psychol.*, 1963, *55*, 437-440.

Jourard, S. M. I-Thou relationship versus manipulation in counseling and psychotherapy. *J. Indiv. Psychol.*, 1959 (a), *15*, 174-179.

Jourard, S. M. Self-disclosure and other cathexis. *J. abnorm. soc. Psychol.*, 1959 (b), *59*, 428-431.

Jourard, S. M. Age trends in self-disclosure. *Merrill-Palmer Quarterly*, 1961 (a), *7*, 191-197.

Jourard, S. M. Religious denomination and self-disclosure. *Psychol. Rep.*, 1961 (b), *8*, 446.

Jourard, S. M. Self-disclosure and Rorschach productivity. *Percept. mot. skills*, 1961 (c), *13*, 232.

Jourard, S. M. Self-disclosure patterns in British and American college females. *J. soc. Psychol.*, 1961 (d), *54*, 315-320.

Jourard, S. M. Some implications of self-disclosure research for counseling and psychotherapy. *Counseling Center Discussion Papers*, University of Chicago, Dec., 1961 (e), *7* (14).

Jourard, S.M. The phenomenon of resistance in the psychotherapist. Paper read at Southeastern Psychological Association, Gatlinburg, Tenn., 1961 (f).

Jourard, S.M. Self-disclosure scores and grades in nursing college. *J. appl. Psychol.*, 1962, *45*, 244-247.

Jourard, S. M. *The transparent self.* Princeton, N.J.: D. Van Nostrand Co., 1964.

Jourard, S. M. Experimenter-subject dialogue: a paradigm for a humanistic science of psychology. In, J.F.T. Bugental, *Challenges of humanistic Psychology*. New York: McGraw-Hill, 1967.

Jourard, S. M. Project replication: experimenter-subject acquaintance and outcome in psychological research. Unpublished manuscript, University of Florida, 1968.

Jourard, S. M. and Landsman, M.J. Cognition, cathexis and the 'dyadic effect' in men's self-disclosing behavior. *Merrill-Palmer Quarterly*, 1960, *6*, 178-186.

Jourard, S.M. and Lasakow, P. Some factors in self-disclosure. *J. abnorm. soc. Psychol.*, 1958, *56*, 91-98.

Jourard, S.M. and Rubin, Jane. Self-disclosure and touching: a study of two modes of interpersonal encounter and their inter-relation. University of Florida, 1968 (Mimeo)

Kanfer, F.H. and Karas, S. Prior experimenter-subject interaction and verbal conditioning. *Psychol. Rep.*, 1959, *5*, 345-353

Korman, L. Getting to know the experimenter and its effect on EPPS-Test performance. Unpublished Master's thesis. University of Florida, 1967

Lefcourt, H. Internal versus external control of reinforcement, a review. *Psychol. Bulletin*, 1966, *65*, 206-220.

Lewin, K. Some social psychological differences between the United States and Germany. In K. Lewin (Ed.), *Resolving social conflicts: selected papers on group dynamics*. Boston: Houghton-Mifflin, 1953.

Mowrer, O.H. *The new group therapy*. Princeton: Van Nostrand, 1964.

Newcomb, T.M. Stabilities underlying changes in interpersonal attraction. In I.D. Steiner and M. Fishbein (Eds.), *Current studies in social psychology*. New York: Holt, Rinehart and Winston, Inc., 1965.

Peres, H. An investigation of nondirective group therapy. *J. consult. Psychol.*, 1947, *11*, 159-172.

Plog, S.C. The disclosure of self in the United States and Germany. Paper read at Amer. Psychol. Assn., Philadelphia, August, 1963.

Powell, W.J. A comparison of the reinforcing effects of three types of experimenter response on two classes of verbal behavior in an experimental interview. Unpublished Doctoral dissertation, University of Florida, 1964.

Powell, W.J. and Jourard, S.M. Some objective evidence of immaturity in underachieving college students. *J. counsel. Psychol.*, 1963, *10*, 276-282.

Resnick, J. Unpublished research, University of Florida, 1968.

Rogers, C.R. The necessary and sufficient conditions of therapeutic personality change. *J. consult. Psychol.*, 1957, *21*, 95-103.

Rosenthal, R. *Experimenter effects in behavioral research.* New York: Appleton-Century-Crofts, 1967.

Rotter, J.D. Generalized expectations for internal vs. external control of reinforcement. *Psychol. Monogr.*, 1966, *80*, No. 1 (Whole No. 609).

Sacks, Eleanor. Intelligence scores as a function of experimentally established social relationships. *J. abnorm. soc. Psychol.*, 1952, *47*, 354-358.

Sechrest, L.B. and Barger, B. Verbal participation and perceived benefit from group psychotherapy. *International J. Group Psychotherapy*, 1961, *11*, 49-59.

Seeman, J. A study of the process of nondirective therapy. *J. consult. Psychol.*, 1949, *13*, 157-168.

Solley, C.M. and Long, J. When is "uh-huh" reinforcing? *Percept. mot. skills*, 1958, *8*, 277.

Taylor, D. Some aspects of the development of interpersonal relationships: social penetration process. Technical Report No. 1. Center for research on social behavior, University of Delaware. For office of Naval Research, Washington, D.C. Principle investigator, Dr. John T. Lanzetta. Contract No. Nonr-2285(04). May 29, 1965.

Taylor, D. and Altman, I. Intimacy-scaled stimuli for use in studies of interpersonal relationships. Research report No. 9 (MF 022.01.03-1002), Naval Medical Research Institute, April, 1966.

Truax, C.B. The process of group psychotherapy: relationship between hypothesized therapeutic conditions and intrapersonal exploration. *Psychol. Monogr.*, 1961, *75*, No. 7 (Whole No. 511).

Truax, C.B. and Carkhuff, R.R. Client and therapist transparency in the psychotherapeutic encounter. *J. counsel. Psychol.*, 1965, *12*, 3-9.

BIOGRAPHICAL SKETCH

Richard M. Drag was born August 25, 1941, in Tarentum, Pennsylvania. In September, 1959, he enrolled at the University of Florida where he received the Bachelor of Arts degree in August, 1963. In September, 1963, he enrolled in the Graduate School of the University of Florida as a United States Public Health Fellow. He received the degree of Master of Arts in December, 1965. From December, 1965, to the present, he has been working toward the degree of Doctor of Philosophy at the University of Florida.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Arts and Sciences and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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